TPI, Inc.

EPA Notification of Preliminary Findings

June 2013

TPI, Inc. Response to EPA Notice of Preliminary Findings

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TPI, Inc. Response to EPA:

Applicable Code Citations and Discussion Points

History: On April 18, 2012 TPI, Inc. located in Newton, IA was inspected by a contracted representative for the Environmental Protection Agency (EPA). Mr. Clifford Nelles of ASE, Inc. was the inspector acting on behalf of EPA Region 7. Inspector Nelles identified thirteen items that were included as Notice of Violation and which resulted in two proposed Penalty Counts. TPI offers the following discussion points with the purpose of reducing the penalties proposed by EPA. It is important to note that no previous violations have been received by TPI and no EPA or Iowa-DNR fines have been received by TPI.

Response to Count 1: Failure to comply with the following manifesting and land disposal restriction requirements:

According to EPA, TPI failed to complete Item 13 of the Manifest with all hazardous waste codes required. TPI disputes this violation based on the following information. TPI has been in operation for five years. In those five years, TPI has changed solvents, manufacturing practices and hazardous waste disposal companies. Through each of those changes, the paint related waste underwent a new hazardous waste determination and, in some cases, the waste codes changed. These changes were appropriately noted on the manifests for the wastes shipped at those times.

The waste code was profiled based on generator knowledge which included a thorough evaluation of the solvent MSDS as well as an evaluation of operational practices as required in 40CFR262.11. Documentation of "generator knowledge" and/or actual analytical testing is not required under federal code which been supported in several EPA interpretations as included in Appendix B. For example, EPA stated in Faxback Document #11603 from RCRA Online that "Our regulations require generators of solid waste to determine whether their waste exhibits the TC or any other hazardous waste characteristic. This determination can be made either by testing the waste or by using knowledge of the waste to determine whether a characteristic is exhibited." Additionally, the same citation states "it is not federal regulation that is requiring actual testing of your waste" supporting that analytical evaluation is not a federal requirement.

Historically, the paint related waste generated by TPI has been coded D001, D035, F003 and F005 for both paint components and spent solvents that may be mixed with it. Based on generator knowledge, it was not coded D005 for barium. Based on changes in operational practices, the U002 waste code for acetone has been removed. After the site inspection conducted by Inspector Nelles, Ms. Deborah Bredehoft of EPA questioned if barium was present in the waste. Although documentation of a hazardous waste determination is not required and generator knowledge is an acceptable evaluation method, TPI could not produce documentation establishing that barium was not present in the waste at levels below the D005 listing. To err on the side of caution, after being questioned about the presence of barium, TPI submitted a sample of the waste for TCLP analysis for barium and added D005 to the waste profile in May 2012. This analysis (located in Appendix 1) indicates that TPI was accurate in its

initial assessment based on generator knowledge and barium is not present in the waste at levels warranting the inclusion of the D005 waste code. TPI will be removing this waste code from the profile.

An additional question was raised by EPA regarding the inclusion of the U002 waste code for unused acetone on prior manifests when waste was hauled by Safety-Kleen. In October, 2011, TPI switched its permitted TSDF from Safety-Kleen to WRR in Wisconsin. It had been Safety-Kleen's recommendation that the U002 code was included on the manifest and waste profile to address the rare occasion that unused acetone was included in the waste collection process. Concurrently, at this time, TPI switched solvents from primarily using acetone to using a solvent purchased from Barton Solvents. Based on this solvent change and changes that had occurred operationally, profiles were changed and the U002 code was not included because TPI had made the determination that all waste accumulated in the Satellite Accumulation Areas was used and should not be coded as a U002 waste.

Finally, with regard to the D035 waste code for MEK, TPI asserts that again based on generator knowledge resulting from review of MSDS and conversations with the solvent manufacturers (both Safety-Kleen and Barton Solvents), the solvents previously used did not require the inclusion of the D035 waste code. Based on questions received at the time of the inspection, however, TPI is again reviewing the need for the D035 waste code and has included it in the profile at this time. If analytical results determine that the inclusion of this waste code is not warranted, it will be removed.

TPI maintains that waste codes included on the manifests were accurately reflective of the waste generated and all waste has been categorized completely at each time paint related solvent waste was generated. As waste streams and operational practices changed, TPI completed new hazardous waste determinations and reflectively changed the waste codes. TPI did not fail to complete Item 13 on the manifests. **Based on these events, TPI requests that EPA eliminate Count 1 as a potential source of penalty.**

Response to Count 2: Operating as a TSDF without a permit by failing to comply with generator requirements:

According to EPA, during its inspection of the facility, Inspector Nelles identified one drum that was not labeled with the words "Hazardous Waste" and two drums that were not closed but had funnels for waste collection in them. These are documented in the Notice of Preliminary Findings in items 1, 3 and 6. TPI does not dispute these findings. Given that TPI is a registered Large Quantity Generator of hazardous waste, shipping more than 144,000 lbs of hazardous waste since January 2012 through May 2013, and has several satellite accumulation areas with more than 600 employees, these inadvertent errors on occasion do occur. TPI works diligently to train employees and monitor activities, minimize risk to employees and the environment, comply with all EPA requirements and continuously improve the safety and effectiveness of its operations. In the five years that TPI has been in operation and in the approximately three years that TPI has been a Large Quantity Generator, it has received no violations from any regulatory agencies and has continued to make good faith efforts to comply.

The facility that TPI operates has a large secondary containment system (30,000 gallons) under the primary working area of the plant in the event of chemical spill or fire. It has a fire suppression system

that is compliant with all local requirements and has had annual fire inspections with no penalties since it opened in 2008. Located throughout the plant are eyewash stations, safety showers, fire extinguishers, first aid stations and well marked egress routes in the event of an emergency. TPI also has facility evacuation route maps located on the walls throughout the facility. The site environmental and safety personnel work constantly to assure compliance with all regulatory requirements throughout each day. TPI has an active waste minimization program as evidenced by the implementation of only low-mercury fluorescent lamps which are recycled as well as a used oil recycling program which is now only recycled through a permitted facility.

TPI disputes the claim by EPA that is was "Operating as a TSDF without a permit by failing to comply with generator requirements." Facts which indicate that TPI makes every effort to comply with the rigorous requirements of a Large Quantity Generator as outlined in 40CFR262.34 , but does not operate as a TSDF include the following:

1. TPI does not treat hazardous waste. TPI does not dispose of hazardous waste as an end destination site. TPI has no waste treatment areas and no disposal areas. TPI does store hazardous waste it generates as a Large Quantity Generator for shipment to and management by a permitted TSDF facility. As evidenced by the manifests and shipment dates, TPI ships waste at least twice per calendar month and often weekly for management by WRR of Wisconsin which is a permitted EPA TSD facility. TPI is registered as a Large Quantity Generator in the EPA tracking databases and operates as such.

2. Inspector Nelles did not identify any drums which had been on site longer than 90-days. TPI is diligent about compliance with LQG status and assures that hazardous waste drums are shipped as frequently as possible to minimize risk to employees and the community. This is one of the core mechanisms TPI has implemented as part of its Contingency Planning. Of the more than eight satellite accumulation areas located throughout the 350,000sq ft plant and the more than 18 drums of hazardous waste generated each month, TPI makes every effort to assure that all drums are marked, labeled, closed and stored in compliance with EPA LQG requirements.

3. TPI has a single hazardous waste storage area (90-day storage area). The hazardous waste storage building is located on the exterior of the building (east end) and was shown to Inspector Nelles as indicated in photos 5-9 from his report. This storage area is a free standing Haz-Store building designed to contain hazardous chemicals and in compliance with EPA requirements. It is labeled as a hazardous waste storage area with appropriate emergency contact information and is secured with limited access. Based on the design of this building with its inherent secondary containment and fire resistant build which meets all flammable liquids storage requirements, TPI asserts that both spill control and fire suppression measures were in place at the time of the inspection. TPI acknowledges that additional spill control and fire suppression items were added to the 90-day hazardous waste storage area, but that the intent of the code was met by the location, design and specifications of the separate hazardous waste storage building and that Inspector Nelles' item 5 in the Notice of Preliminary Findings is not accurate.

4. All locations where hazardous waste is collected inside of the plant are satellite accumulation areas. All satellite accumulation areas contain drums that are located within 50 ft of the generation point and

are appropriately labeled as satellite accumulation drums. A single 55-gallon drum is located at each satellite collection station and frequently these drums are located in flammable storage cabinets to offer additional secondary containment and safety for employees in the plant. All drums are properly labeled, bonded, grounded and closed. Although Inspector Nelles questioned the location of one satellite accumulation area (near the paint booth, listed in Appendix 1-9 in the inspection report as column 36) and incorrectly identified it as a hazardous waste storage area, it is managed as a satellite accumulation area. It was at this location that Inspector Nelles issued violation #2 for a missing start accumulation date. This drum was located in the satellite accumulation area and, therefore, no start accumulation date is required. Additionally, the location meets the definition of a satellite accumulation area. It is correctly located within the control of the operator with no doorways, hallways or impediments to accessing the satellite accumulation drums and is near the point of generation (photos located in Appendix 3). This is consistent with the guidance that EPA has issued identified in Appendix 4, regarding the location of Satellite Accumulation Areas. Inspector Nelles also indicated in item #4 of the Notice of Preliminary Findings that the hazardous waste storage area was not being inspected weekly. This is inaccurate. As shown in Attachment 15 of the Inspection Report, the Hazardous Waste Storage Area log, which is located on the East exterior of the building, is accurate and complete. The waste storage area that Inspector Nelles is referring to is the same Satellite Accumulation Area he incorrectly identified as a 90-day hazardous waste storage area. This Satellite Accumulation Area is not required to be inspected on a weekly basis. Based on the language in 40CFR262.34 and in the guidance provided in RCRA online #14703 (Appendix 4), Satellite Accumulation Areas are not required to have a weekly inspection log.

5. In items 7-12 of the Notice of Preliminary Findings Inspector Nelles identified several deficiencies in the TPI contingency plan. At the time of the inspection, TPI was in the process of updating and improving the Contingency Plan. TPI agrees that the plan in place at the time of the inspection was not in compliance with all of the details of the Code as required for Large Quantity Generators, however it is important to note that within 17 days of the inspection, a compliant Contingency Plan was submitted to EPA by TPI. In documents sent to EPA on May 12, 2012, the updated contingency plan as well as documentation demonstrating that the Contingency Plan had been submitted to the local first responders (Appendix 5) was sent the EPA. In this, all deficiencies noted in the inspection report were corrected. The timeline between inspection (April 18) and compliance (May 12) is 17 business days. In addition to the updated, compliant contingency plan, TPI has continued to improve on its overall emergency response program including emphasizing emergency response procedures during initial training of employees, minimizing risk to employees and the environment through safer work practices, and through the use of a roster to identify all employees in the plant and a visitor log in the event that personnel need to be accounted for.

6. Item #13 of the Notice of Preliminary Findings indicates that Inspector Nelles determined that many training requirements are not adequately being addressed. TPI disputes this finding. All employees of TPI initially receive training that teaches them about the hazardous chemicals present in the plant. This training occurs prior to working in the warehouse. All employees receive training about emergency response procedures, what alarms sound like, how employees are to respond, where evacuation points

are and the location of a rally point. Employees are told who the emergency coordinator is. The emergency coordinator and the hazardous waste technician have received DOT and EPA training. The records documenting this training were submitted to EPA on May 12, 2012. These are the only two individuals are allowed access/entry into the hazardous waste storage area, are allowed to sign manifests or are allowed to collect satellite accumulation containers that are full and replace them with empty collection drums. TPI maintains that the training of these individuals as well as the training in place for general employees meets the criteria identified in the LQG code requirements.

Proposed adjustment to Penalty Computation Worksheet:

Based on the compilation of this evidence, the rapid response to achieve compliance to each item identified in the Notification of Preliminary Findings, the documented good faith efforts and the historical compliance that TPI has demonstrated, TPI asserts that a downward adjustment of the proposed penalty is warranted. After evaluation of the Penalty Computation Worksheet, TPI proposes the following adjustments:

1. EPA personnel have assigned the following values to items on the Gravity Based Matrix:

a. Potential for Harm: moderate. TPI proposes that this should be reduced to minor. The facility has numerous secondary containment measures in place, a compliant fire suppression system, spill control and decontamination stations throughout the plant, minimized on-site hazardous waste and a strong good faith effort to operate as a compliant Large Quantity Generator. Based on all of the safeguards in place at the plant as well as the efforts of personnel at the facility, TPI asserts that the Potential for Harm to the community, employees or the environment is highly unlikely and meets the definition of minor.

b. Extent of Deviation: moderate. TPI agrees with this assessment. Given the detailed requirements for Large Quantity Generator Contingency plans identified in the federal code TPI acknowledges that the Contingency Plan in place at the time of the inspection did not meet all of the detailed requirements for a Large Quantity Generator. TPI also acknowledges that at the time of the inspection, there were some drums inadvertently left open, undated or unlabeled but also asserts that these violations were corrected immediately. These meet the criteria of "moderate" deviations from code requirements.

c. Cell Position: 75%. TPI proposes that this should be reduced to 25%. Given that these violations were the first in the history of the facility, they did not result in any damage to employees or the environment and they were all rapidly corrected in a positive, good faith manner, TPI asserts that this reduction is warranted.

Based on these adjustments, TPI proposes that the penalty amount for Count 2 should be $1,062 instead of $10,270 as proposed by EPA.

2. EPA personnel have assigned the following values to items on the Multi-Day/Multiple Occurrence Component for Count 2:

a. Potential for Harm: moderate. TPI proposes that this should be reduced to minor. The facility rapidly responded to violations by correcting many of them at the time of the inspection and by correcting the remaining concerns within 17 days of the initial inspection. Based on the rapid response and the correlating safety measures in place at the time of the inspection, TPI asserts that the Potential for Harm to the community, employees or the environment is highly unlikely and meets the definition of minor.

b. Extent of Deviation: moderate. TPI agrees with this assessment.

c. Cell Position: 75% TPI proposes that this should be reduced to 25%. Given that these violations were the first in the history of the facility, they did not result in any damage to employees or the environment and they were all rapidly corrected in a positive, good faith manner, TPI asserts that this reduction is warranted.

Based on these adjustments, TPI proposes that the Multiday/Multiple Occurrence Component for Count 2 should be calculated for 17 days – 1 day (16 days) at 25% of the cell value ($213) for a total penalty amount of $3,410 instead of $38,775 as proposed by EPA.

This results in an initial penalty total of: $4,472 instead of the proposed $49,045. TPI also proposes a 15% reduction in overall penalty based on the good faith effort to comply with regulations that the company has demonstrated historically. **This results in a Total Penalty Amount of $3,800.**

In addition to paying this penalty amount, TPI proposes to undertake a Supplemental Environmental Project. TPI acknowledges that their processes currently generate a large amount of waste acetone each calendar month. It may be possible for TPI to implement the use of a solvent recycling system to recover this acetone and minimize the waste acetone quantity. TPI proposes to dedicate employee time and resources over a one year time frame to evaluate purchase of a solvent recycler and, if it meets the necessary quality control, production and financial limits, to implement a solvent recycling program through the purchase of a solvent recycling unit. TPI offers to issue progress reports quarterly regarding the research on the solvent recycling unit and estimates that the investment in the process as well as the purchase of a recycling unit, if warranted, is valued at approximately $38,500. This calculation is based on 10% employee time for a year (208 hours/year) at a rate of $35/hr for which equals $7,280, $1,220 for analytical analysis and purchase of a $30,000 solvent recycling unit.

In Summary:

- TPI disputes Count 1 of the Penalty Computation Worksheet and requests that EPA dismiss Count 1.
- As documented above, TPI disputes some of the inspector's findings from the April 18, 2012 site inspection which resulted in Count 2
- TPI propose a reduction in penalty from $51,008 to $3,800 for Count 2.
- TPI proposes to undertake a SEP to investigate implementation of a solvent recycling program.
- TPI estimates that the SEP could cost $38,500 if a solvent recycling system is implemented.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

JUN 13 2012

Mr. Jim Bailey
Environmental Health and Safety Coordinator
TPI Iowa LLC
2300 North 33rd Avenue East
Newton, Iowa 50208

RE: TPI Iowa LLC
Newton, Iowa
EPA RCRA ID No.: IAR000510156

Dear Mr. Bailey:

On April 18, 2012, a representative of the U.S. Environmental Protection Agency (EPA) inspected your facility. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA). A copy of the inspection report is enclosed for your information.

The EPA is presently reviewing the findings of the report to determine your facility's compliance with the applicable statutes, permits, or regulations. If it is determined that violations exist, the EPA reserves all rights it may have to take appropriate enforcement action, regardless if any violations were subsequently corrected.

If there are any questions regarding this report or actions that you may want to take, please contact me at (913) 551-7164.

Sincerely,

Deborah Bredehoft
Compliance Officer
Waste Enforcement and Materials Management Branch

Enclosure

cc: Cal Lundberg, Chief, Contaminated Sites Section
Iowa Department of Natural Resources

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

AT

TPI IOWA LLC
2300 N. 33rd Avenue East
Newton, IA 50208
(641) 791-3500

EPA RCRA ID No. IAR000510156

ON

April 18, 2012

BY

Booz Allen Hamilton

FOR

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Environmental Services Division

INTRODUCTION

At the request of the Environmental Services Division (ENSV) and the Environmental Field Compliance Branch (EFCB) of the U.S. Environmental Protection Agency (EPA) Region 7, Booz Allen Hamilton (Booz Allen) conducted a Resource Conservation and Recovery Act (RCRA) Compliance Evaluation Inspection (CEI) on April 18, 2012 at TPI Iowa LLC (TPI) located in Newton, Iowa. The CEI was conducted under the authority of Section 3007(a) of RCRA, as amended. Booz Allen gathered information and data necessary for EPA to determine compliance with applicable regulatory and statutory requirements. During the CEI, it was discovered that TPI currently generates more than 1,000 kilograms (2,200 pounds) of hazardous waste per calendar month. At this generation rate, TPI is currently operating as a large quantity generator (LQG) of hazardous waste. TPI is also operating as a generator of used oil.

The *Region 7 Multimedia Screening Checklist* was not completed during this CEI, as a multimedia screening was completed during a Clean Air Act (CAA) CEI conducted by EPA on March 28, 2012.

PARTICIPANTS

The following persons participated in the CEI. Copies of the business cards obtained from the facility representatives during the CEI are included in Attachment 1.

Facility Representatives, TPI:

Name	Title	E-mail/fax	Phone
Jim Bailey	Environmental, Health, & Safety Coordinator	jbailey@tpicomposites.com fax (641) 791-3553	(641) 791-3524
Mark B. Parriott (entry and exit briefing only)	General Manager	mparroitt@tpicomposites.com fax (641) 791-3550	(641) 791-3501
David E. Lloyd (entry and exit briefing only, via telephone)	Corporate EHS Engineer	dlloyd@tpicomposites.com fax not obtained	(401) 247-4096
Rick Myers	Warehouse Supervisor	Email and fax not obtained	Phone number not obtained
Jay Barnes	Paint Team Leader	Email and fax not obtained	Phone number not obtained

EPA Representative, Booz Allen Hamilton:

Name	Title	E-mail/fax	Phone
Clifford A. Nelles	Environmental Specialist	nelles_clifford@bah.com fax (816) 448-3874	(816) 448-3254

INSPECTION PROCEDURE

I arrived at TPI at approximately 0750 hours on April 18, 2012 to conduct the visual reconnaissance. The visual reconnaissance was conducted to identify and document potential areas of concern from the adjacent roadways. I identified no environmental issues or areas of concern during this preliminary examination.

At approximately 0755 hours on April 18, 2012, I entered the lobby at the visitors' entrance. I introduced myself to Mr. Jim Bailey and explained the purpose of the CEI to him. Since the site contact was listed as Mr. David Lloyd (with an address in Rhode Island), I asked Mr. Bailey if I could speak to the environmental manager at the facility. Mr. Bailey explained that he is the Environmental Coordinator for the facility. Mr. Bailey and I adjourned to a conference room, where Mr. Mark Parriott joined us approximately five minutes later. I then proceeded to conduct the entry briefing with Messrs. Bailey and Parriott. Mr. David Lloyd also participated during the entry briefing via teleconference.

During the entry briefing, I presented Messrs. Bailey and Parriott with my EPA credential letter and business card; and a letter and business card from the EPA Task Order Contracting Officer's Representative (TOCOR), Mr. Gary Witkovski. I also presented Messrs. Bailey and Parriott with a copy of RCRA §3007(a) (stipulating hazardous waste inspection authority) as well as a copy of 42 U.S.C. 1001/1002 (requiring the provision of truthful and accurate information and documentation). These documents were read by Messrs. Bailey and Parriott prior to proceeding with the CEI.

I then explained the EPA policy regarding the collection of confidential business information (CBI) to Messrs. Bailey and Parriott. I also stated that, at the conclusion of the CEI, Mr. Parriott would be presented with the EPA *Confidentiality Notice*. At that time, a CBI claim could or could not be made for any or all of the information collected during the CEI.

The CEI consisted of a discussion of facility operations, waste generation and waste management practices, review of pertinent records, visual inspection, and exit briefing. Mr. Bailey acted as the official facility representative during the CEI and accompanied me during the visual inspection.

I completed the CEI and summarized my findings and recommendations on April 18, 2012, with Messrs. Bailey, Parriott, and Lloyd. Based upon the initial observations, **I issued a Notice of Preliminary Findings (NOPF) to TPI at the conclusion of the CEI.**

During the exit briefing, Mr. Parriott acknowledged receipt of the following by his signature: a Confidentiality Notice (Attachment 2), which he read and signed indicating no confidential business information had been provided during the CEI, a Receipt for Documents and Samples (Attachment 3), and the NOPF (Attachment 4). A total of twenty-six (26) photographs were taken during the CEI, twenty-five (25) of which are included in Attachment 5.

FINDINGS AND OBSERVATIONS

Facility Operations

TPI manufactures wind turbine blades used for the production of electricity. Major raw materials used by the facility include balsa wood, Styrofoam plastic, plastic and fiberglass laminates, carbon fibers, hardeners, paints, and solvents. Facility processes include cleaning the turbine blade jigs with acetone and laminating fiberglass and plastic inside of molds. Laminating consists of taking long strips of fiberglass and plastic, laying them into a mold, and then spraying them with a combination of resin, catalyst, hardener, and adhesive. After laminating, the turbine blades are sanded and painted. TPI's primary North American Industrial Classification System (NAICS) codes are 326130 [Laminated Plastics Plate, Sheet (Except Packaging), and Shape Manufacturing] and 326199 (All Other Plastics Product Manufacturing).

TPI began operations at the present location in May 2008, within a light industrial area in the northern portion of Newton, IA. The facility consists of one rectangular shaped building encompassing approximately 376,000 square feet. TPI currently has approximately 600 full-time employees, who work one of a variety of shifts (0500 to 1330 hours, 1300 to 2130 hours, or 2100 to 0530 hours Monday through Friday; 0500 to 1730 hours or 1700 to 0530 hours Saturday and Sunday).

Facility Status

The RCRA Handler Information Report (Attachment 6) indicates that TPI is registered with EPA, under EPA ID IAR000510156, as a LQG of hazardous waste. Through review of current operations, interviews, and a review of waste disposal records, I determined that TPI generates D001, D002, and D035 characteristic; and F003 and F005 listed hazardous wastes.

During the CEI, I determined that TPI generates four primary hazardous waste streams: waste adhesive remover, paint related waste, spent acetone, and waste acetone rags and wipes. Other hazardous wastes generated at TPI are episodically generated, and include off-specification/out of date materials (e.g., flammable polyester resin, epoxy hardener/curing agent), and waste flammable liquids generated during cleaning operations.

The four primary hazardous waste streams are generated fairly consistently throughout the calendar year. I asked Mr. Bailey for a copy of TPI's 2011 Hazardous Waste Biennial Report during the CEI (Attachment 7). I used the quantities of hazardous wastes reported in the 2011 Hazardous Waste Biennial Report (divided by 12 months per year) to determine TPI's monthly hazardous waste generation rate.

Based on the 2011 Hazardous Waste Biennial Report, I calculated an average monthly generation rate for paint related waste, spent acetone, waste acetone rags and wipes, and waste adhesive remover to be approximately 19,521 pounds per month (total). I estimated the generation rate for the other hazardous wastes reported in TPI's 2011 Hazardous Waste Biennial Report (e.g., the episodically-generated wastes described above) as an approximate average of 1,544 pounds per month. I asked Mr. Bailey if the generation rates for 2012 were approximately the same as 2011, and he stated that they were approximately the same. Therefore, I determined the total hazardous waste generation rate to be approximately 21,065 pounds per calendar month, and inspected TPI as a LQG of hazardous waste.

TPI also generates approximately 22 pounds of used oil per calendar month. Therefore, I also inspected TPI as a generator of used oil. Universal wastes (e.g., hazardous waste lamps or batteries managed per 40 CFR §273) are not generated at TPI.

Following the CEI, I amended the RCRA Handler Information Report to reflect TPI's current facility information. Specifically, I changed the current owner of the site to Sir Properties Trust. Added Used Oil to the Type(s) of Regulated Activity section of the report, and deleted the U002 listed hazardous waste code from the Hazardous Wastes Handled section of the report.

Facility Waste Streams

The following is a Waste Stream and Waste Handling Table for TPI. The table describes the major waste streams generated on-site, waste management practices, and off-site treatment, storage, and disposal.

The hazardous waste generation rates described in the Waste Stream and Waste Handling Table are based on the quantities presented in the 2011 Biennial Report, as well as information provided by Mr. Bailey. A description of the major waste streams and management practices is also found in the *CEI Worksheets and Checklists* (Attachment 8).

Waste Stream and Waste Handling Table TPI IOWA LLC – Newton, IA					
Name of Waste Stream	**Generating Process**	**Hazardous Determination**	**Estimated Generation Rate**	**On-Site Management**	**Off-Site Management**
1) Waste Adhesive Remover	Generated from the cleaning of adhesive spray guns	The facility considers the adhesive remover to be hazardous (D001) based on product knowledge. Material Safety Data Sheets (MSDS)	Approximately 108 pounds per month (2011 Hazardous Waste Biennial Report)	55-gallon satellite accumulation container. Full containers are moved to hazardous waste container storage area (HWCSA)	Picked up by Safety-Kleen for disposal at Dolton, IL.
NOPF Item #6. See Visual Inspection section for associated findings, which includes failure to keep a hazardous waste satellite accumulation container closed					
2) Used Oil	Generated by the replacement of hydraulic oil in molds	The facility manages this waste as used oil, per 40 CFR 279	Approximately 22 pounds per month	Stored in 55-gallon used oil storage containers	Picked up by Safety-Kleen for fuel blending
3) Spent Acetone	Generated by the cleaning of turbine blade jigs	Hazardous (D001, F003) based on product knowledge (MSDSs)	Approximately 7,525 pounds per month (2011 Hazardous Waste Biennial Report)	55-gallon satellite accumulation containers. Full containers are moved to hazardous waste container storage area (HWCSA)	Picked up by Barton Solvents for fuel blending at WRR Environmental in Eau Claire, WI
NOPF Item #6. See Visual Inspection section for associated findings, which includes failure to keep a hazardous waste satellite accumulation container closed					
4) Paint Related Waste	Generated from the cleaning of paint guns and paint lines	Hazardous (D001, D035, F003, F005) based on product knowledge (MSDSs)	Approximately 9,742 pounds per month (2011 Hazardous Waste Biennial Report)	Accumulated in 55-gallon hazardous waste storage container	Picked up by Barton Solvents for fuel blending at WRR Environmental in Eau Claire, WI
NOPF Items #1, #2, #3, #4, #5, and 14. See Visual Inspection section for associated findings, which includes failure to mark a hazardous waste storage container with the words "hazardous waste," failure to mark an accumulation start date on a hazardous waste storage container, failure to keep a hazardous waste storage container closed, failure to conduct weekly inspections of a hazardous waste container storage area, failure to have adequate spill control and safety equipment at a hazardous waste container storage area, and failure to make an adequate hazardous waste determination.					

Waste Stream and Waste Handling Table TPI IOWA LLC – Newton, IA					
Name of Waste Stream	**Generating Process**	**Hazardous Determination**	**Estimated Generation Rate**	**On-Site Management**	**Off-Site Management**
5) Waste Acetone Rags and Wipes	Generated by the cleaning of turbine blade jigs and air rollers	Hazardous (D001, F003) based on product knowledge [material safety data sheets (MSDSs)]	Approximately 2,146 pounds per month (2011 Hazardous Waste Biennial Report)	55-gallon satellite accumulation containers. Full containers are moved to hazardous waste container storage area (HWCSA)	Picked up by Barton Solvents for fuel blending at WRR Environmental in Eau Claire, WI
6) Waste Off-Specification Materials	Generated by discarding off-specification or out-of-date materials such as resin, epoxy, hardener, and adhesive	Hazardous (D001 and/or D002) based on product knowledge (MSDSs)	Approximate average of 1,544 pounds per month (2011 Hazardous Waste Biennial Report)	55-gallon satellite accumulation containers. Full containers are moved to hazardous waste container storage area (HWCSA)	Picked up by Barton Solvents for fuel blending at WRR Environmental in Eau Claire, WI or Safety-Kleen for disposal at Dolton, IL.
7) Trim Dust	Generated from the sanding of excess fiberglass and plastic on turbine blades before painting	The facility considers this to be nonhazardous waste, based on product knowledge	Approximately 6,167 pounds per month	Stored in 55-gallon containers	Picked up by Gralnek Disposal for disposal in Newton County Landfill
8) Waste Fluorescent Lamps	Maintenance replacing spent lamps throughout the facility	The facility considers this to be nonhazardous waste, based on product knowledge	Approximately three waste lamps per month	Stored in fiberboard storage containers in Compressor Room	Shipped to Granger for recycling
9) Spent paint Booth Filters	Replacing paint booth filters when they become ineffective	The facility considers this to be nonhazardous waste, based on product knowledge	Unknown	40 cubic yard roll-off container	Picked up by Gralnek Disposal for disposal at Newton County Landfill
10) General Trash	Generated from office and cafeteria	The facility considers this to be nonhazardous waste, based on product knowledge	Unknown	Various containers throughout the facility	Picked up by Gralnek Disposal for disposal at Newton County Landfill

Visual Inspection

The manufacturing processes and facility maintenance activities generate the solid and hazardous wastes, used oil, and universal waste listed in the Waste Stream and Waste Handling Table above. During the CEI, the generation, accumulation, and storage areas associated with these wastes were visually inspected. Each of the areas discussed below are identified on the map. A copy of a facility map was obtained, and is included as Attachment 9.

TPI manufactures turbine blades by taking long strips of fiberglass and plastic, laying them onto a mold and then spraying them with a combination of resin, catalyst, hardener, and adhesive. Copies of the MSDSs for the products used (AIRSTONE™ 780E Resin, V66V55 Pour off Catalyst, AIRSTONE™ 783H Hardener, and 3M™ SUPER 77 MULTIPURPOSE SPRAY ADHESIVE) are included in Attachments 10 through 13, respectively.

Adjacent to the flange trim booth, I observed four dust collectors (Attachment 5, Photo 1). The dust collectors capture the dust from the trimming and sanding of turbine blades prior to painting. TPI considers the fiberglass and plastic dust to be a nonhazardous waste by product knowledge.

In the Maintenance Shop, I observed a waste fluorescent lamps storage container holding approximately 41 waste lamps (Attachment 5, Photos 2 and 3). The container is labeled with the words "universal waste lamps," and is not closed or dated. However, I observed only green-tipped lamps and lamps with green labeling (indicating that the lamps are nonhazardous). Mr. Bailey stated that when the facility was built, it was stocked with only nonhazardous fluorescent lamps, and that all waste lamps are sent back to the supplier (Granger) for recycling. As the fluorescent lamps at TPI do not appear to be mercury-containing (D009) lamps, I noted no RCRA concerns with the waste fluorescent lamps storage container observed in the Maintenance Shop.

At Column 36, I observed a satellite accumulation container holding approximately 20 gallons of waste acetone rags (Attachment 5, Photo 4). The 55-gallon satellite accumulation container appears to be in good condition with no apparent leaks or damage, labeled with the words "hazardous waste," near the point of generation, under the control of the operator, and closed. TPI uses acetone and rags or wipes to clean the "jigs" or structures that the turbine pieces are placed into during lamination. TPI considers waste acetone and rags, as well as spent acetone, to be D001 characteristic and F003 listed hazardous waste by product knowledge. A copy of the MSDS for ACETONE is included as Attachment 14. Based on the MSDS, the hazardous waste determination appears to be adequate.

At the east end of the building, I observed a Hazardous Waste Container Storage Area (HWCSA). Inside of the HWCSA, I observed two 55-gallon hazardous waste storage containers. Both hazardous waste storage containers appear to be structurally sound and are closed. One hazardous waste storage container holds approximately 50 gallons of

spent acetone, and is labeled with the words "hazardous waste" and an accumulation start date of 04/13/12 (Attachment 5, Photo 5). The other hazardous waste storage container holds approximately 50 gallons of waste acetone rags, and is labeled with the words "hazardous waste" and an accumulation start date of 04/16/12 (Attachment 5, Photo 6).

I did not observe any spill control, fire fighting, or decontamination equipment/materials in or near the HWCSA.

NOPF#5 – Failure to have spill control equipment, fire control equipment and decontamination equipment available at a hazardous waste container storage area [40 CFR §262.34(a)(4) – 265.32(c)].

During the CEI, employees of TPI placed a fire extinguisher (Attachment 5, Photo 7), and spill containment equipment (granular absorbent and absorbent socks) in the HWCSA (Attachment 5, Photos 8 through 9).

I asked Mr. Bailey if the operators carry radios or company-supplied cell phones. He stated that the operators are required to carry radios. I asked Mr. Bailey if the HWCSA is inspected. He stated that the HWCSA is inspected on a weekly basis. During the records review, I reviewed the inspection logs for the last three years and noted no missed inspection weeks or other RCRA concerns. Copies of the inspection logs from January 2, 2012 through April 16, 2012 is included in Attachment 15 as examples.

At Column 32, I observed a satellite accumulation container holding approximately 15 gallons of waste acetone rags (Attachment 5, Photo 10). The 55-gallon satellite accumulation container appears to be in good condition with no apparent leaks or damage, is labeled with the words "hazardous waste," near the point of generation, under the control of the operator, and closed.

In the Maintenance Warehouse, I was introduced to Mr. Rick Myers (Warehouse Supervisor). Mr. Myers conducts the weekly inspections of the HWCSA and cleans the adhesive spray guns. I provided Mr. Myers with a copy of 42 U.S.C. 1001/1002. This document was read by Mr. Myers before proceeding with the inspection.

I observed a satellite accumulation container in the Maintenance Warehouse holding approximately five gallons of waste adhesive remover (Attachment 5, Photo 11). The 55-gallon satellite accumulation container appears to be in good condition with no apparent leaks or damage, is labeled with the words "hazardous waste," near the point of generation, and under the control of the operator. However, the satellite accumulation container has an open funnel in the large bung hole on top of the container (Attachment 5, Photo 12), and the small bung hole on top of the container is open (Attachment 5, Photo 13). Waste was not being actively added or removed at the time of my observation. Therefore, the satellite accumulation container is not closed.

NOPF#6 – Failure to keep a hazardous waste satellite accumulation container closed [40 CFR §262.34(c)(1)(i) – 265.173(a)].

During the CEI, employees of TPI closed the satellite container by removing the open funnel and replacing the bungs (Attachment 5, Photos 14 and 15).

I asked Mr. Myers how the adhesive spray guns are cleaned. He stated that the guns are cleaned by spraying adhesive remover through the gun into the satellite container. TPI considers the waste adhesive remover to be D001 characteristic hazardous waste by product knowledge. A copy of the MSDS for the adhesive remover and a Safety-Kleen profile for the waste adhesive remover are included as Attachments 16 and 17, respectively. Based on the MSDS and profile information, the D001 characteristic hazardous waste determination appears to be adequate.

I observed a satellite accumulation container at Column 19 holding approximately 45 gallons of waste acetone (Attachment 5, Photo 16). The 55-gallon satellite accumulation container appears to be in good condition with no apparent leaks or damage, is labeled with the words "hazardous waste," near the point of generation, and under the control of the operator. However, the satellite accumulation container has an open funnel on top (Attachment 5, Photo 17). Waste was not being added or removed at the time of my observation. Therefore, the satellite accumulation container is not closed.

NOPF#6 – Failure to keep a hazardous waste satellite accumulation container closed [40 CFR §262.34(c)(1)(i) – 265.173(a)].

During the CEI, employees of TPI closed the container by removing the funnel from the large bung hole and replacing the bung (Attachment 5, Photo 18).

TPI uses one paint and one solvent for the painting operation. Copies of the MSDSs for these products (POLANE HB paint and BARSOL A-4212 solvent) are included as Attachments 18 and 19, respectively.

At the paint booth, I was introduced to Mr. Jay Barnes (paint team leader). I provided Mr. Barnes with a copy 42 U.S.C. 1001/1002. This document was read by Mr. Barnes before proceeding with the inspection. Besides painting, Mr. Barnes also cleans the paint guns. I asked Mr. Barnes how the paint guns are cleaned. He stated that the paint guns are cleaned by taking a cart (Attachment 5, Photo 19) into the paint booth, hooking up the guns to the cart, and spraying the waste paint and solvent into the five gallon container on the cart. I asked Mr. Barnes if the guns are ever sprayed onto the paint booth filters. He stated that they are not sprayed onto the filters.

The paint booth filters are removed when they become inefficient. The filters, which are dry when removed, are disposed in a 40-cubic-yard rolloff container as nonhazardous waste. Spent paint booth filters are picked up by Gralnek Disposal for landfilling at the Newton County Landfill. D001 is the only hazardous waste characteristic identified in the paint MSDS, and no listed constituents are identified. It appears that the nonhazardous waste determination for dry, spent paint booth filters is adequate.

I asked Mr. Barnes how the paint related waste from paint gun cleaning is managed. He stated that the five-gallon container on the cart is taken to a satellite accumulation container after paint gun cleaning. The satellite container identified by Mr. Barnes is approximately 50 feet away, on the other side of the molds at Column 36. I informed Mr. Bailey that I do not consider this container to be a satellite accumulation container as it is not at or near the point of generation or under the control of the operator. I explained that I consider the container at Column 36 to be a hazardous waste storage container.

The 55-gallon hazardous waste storage container at Column 36 appears to be structurally sound and holds approximately 50 gallons of paint related waste. However, the hazardous waste storage container is not labeled with the words "hazardous waste" or marked with an accumulation start date. In addition, the hazardous waste storage container has an open funnel on top (Attachment 5, Photos 20 and 21). Waste was not being added or removed at the time of my observation. Therefore, the hazardous waste storage container is not closed.

NOPF#1 - Failure to mark a hazardous waste storage container marked with the words "hazardous waste" [40 CFR §262.34(a)(3)].

NOPF#2 – Failure to mark an accumulation start date on a hazardous waste storage container [40 CFR §262.34(a)(2)].

NOPF#3 – Failure to keep a hazardous waste storage container closed [40 CFR §262.34(a)(1)(i) – 265.173(a)].

I did not observe any spill control, fire fighting, or decontamination equipment/materials in or near the Column 36 HWCSA.

NOPF#5 – Failure to have spill control equipment, fire control equipment and decontamination equipment available at a hazardous waste container storage area [40 CFR §262.34(a)(4) – 265.32(c)].

I asked Mr. Bailey if the operators in the area carry radios or company-provided cell phones. He stated that the operators are required to carry radios for communication. I asked Mr. Bailey if the Column 36 HWCSA is inspected. He stated that the HWCSA is not inspected.

NOPF#4 – Failure to conduct weekly inspections of a hazardous waste container storage area [40 CFR §262.34(a)(1)(i) – 265.174].

I asked Mr. Bailey if he knew how long the hazardous waste storage container has been there. He stated that it could not have been more than a month, due to the frequency of hazardous paint related waste shipments.

During the CEI, employees of TPI moved the hazardous waste storage container at Column 36 to the designated HWCSA at the east end of the building. A new, 55-gallon

hazardous waste storage container was placed at Column 36 (Attachment 5, Photo 22). I noted that the new hazardous waste storage container is structurally sound, labeled with the words "hazardous waste," dated 04/18/12, and closed. The new hazardous waste storage container is empty.
During the records review, I obtained copies of the manifests and land disposal restriction (LDR) notifications for the last shipments that included paint related waste (dated March 20, 2012 and March 1, 2012). These copies are included in Attachments 20 and 21, respectively. Following the CEI, I noted that the paint related waste on both the March 20, 2012 and March 1, 2012 manifests and LDR notifications only carries the D001 characteristic hazardous waste code. This is different from the waste characterization information obtained during the CEI. Specifically, paint related waste was identified as a D001 and D035 characteristic; and F003 and F005 listed hazardous waste on the 2011 Hazardous Waste Biennial Report.

On May 9, 2012, I called Mr. Lloyd to discuss this potential issue. He explained that TPI used Safety-Kleen to transport and dispose of the paint related waste until October 2011, when the switch to Barton Solvents was made. He also stated that the paint and solvent products have not changed. I asked Mr. Lloyd for copies of a manifest and LDR notification for a shipment containing paint related waste to Safety-Kleen. I also called Mr. Bailey and asked for a copy of the Barton Solvents waste profile for the paint related waste.

On May 9, 2012, Mr. Lloyd sent an e-mail transmitting a scanned copy of the manifest and LDR notification for an October 3, 2011 shipment of paint related waste to Safety-Kleen. A copy of the transmittal e-mail is included as Attachment 22. Copies of the manifest and LDR for the October 3, 2011 shipment are included in Attachment 23. Mr. Lloyd also forwarded a copy of the WRR Environmental Services/Barton Solvents profile for paint related waste on May 9, 2012 (Attachment 24).

Paint related waste is a combination of waste POLANE HB paint flushed from the paint guns and spent BARSOL A-4212 used to flush the paint. The MSDS for the POLANE HB paint (Attachment 18) identifies a flash point of 81 degrees Fahrenheit (D001 characteristic). No other characteristic or listed constituents are identified. The MSDS for the BARSOL A-4212 solvent (Attachment 19) identifies a flash point of -4 degrees Fahrenheit (D001 characteristic), toluene at 25 percent by weight (F005 listed constituent), and various F003 listed constituents [2-propanone (acetone) at >9 percent by weight, methanol at 3 percent by weight, and ethyl benzene at 2 percent by weight]. The BARSOL A-4212 solvent MSDS also lists 2-butanone (methyl ethyl ketone, a D035 characteristic constituent) at 2 percent by weight.

Based on the MSDS information presented above, it appears that the D001 and D035 characteristic; and F003 and F005 listed hazardous wastes determination for paint related waste identified in the 2011 Biennial Report appears to be adequate. The current hazardous waste determination (D001 characteristic hazardous waste) used since the switch to Barsol Solvents in October 2011 appears to be inadequate.

In addition, the former Safety-Kleen waste determination (D001 characteristic, and F003 and F005 listed hazardous waste), as specified on the October 3, 2011 manifest and LDR notification, may not be adequate. This hazardous waste determination does not include the D035 characteristic hazardous waste code. It appears that an MEK concentration of 2 percent by weight in the paint product may exceed the D035 characteristic threshold of 200 milligrams per liter (or 200 parts per million) if analyzed via toxic characteristic leaching procedure (TCLP).

NOPF#14 – Failure to perform an adequate hazardous waste determination for paint related waste [40 CFR §262.11].

Item #14 was not included on the NOPF left with the facility on April 18, 2012. It was added on May 10, 2012, and Mr. Lloyd was notified by email on May 10, 2012.

It should be noted that in his May 9, 2012 e-mail, Mr. Lloyd stated that he has initiated an update of the paint related waste profile in response to the hazardous waste determination concerns discussed above.

I also noted that the Barsol Solvents manifests and LDR notifications identify the U002 listed hazardous waste code (discarded commercial chemical product, unused acetone) for waste acetone. Based on the description of this waste obtained during the CEI, it does not appear that unused acetone is disposed in this waste stream. As such, it does not appear that the U002 hazardous waste code is applicable to TPI's waste acetone.

During the CEI, I asked Mr. Bailey if TPI performs servicing on the fork trucks (which, according to Mr. Lloyd, are owned by TPI). Mr. Bailey stated that Forklifts of Des Moines, of Des Moines, Iowa services the fork trucks. He also stated that after servicing, Forklifts of Des Moines removes the used oil and oil filters for storage at their facility. A copy of an invoice for fork truck servicing, dated January 9, 2012, is included as Attachment 25. The invoice includes an "environmental charge," indicating that TPI is being charged for waste disposal.

Following the CEI, I performed an online search of the EPA RCRA Information System (RCRAInfo) to determine if Forklifts of Des Moines has an EPA ID number. I could not locate an EPA ID number associated with the company name (Forklifts of Des Moines) or the company address (1625 East Euclid Avenue, Des Moines, IA). As such, I added NOPF item #15 for failing to ship used oil using a used oil transporter with an EPA ID number. However, after consulting with the EPA TOCOR, Forklifts of Des Moines is considered to be a co-generator of the used oil. As a co-generator, Forklifts of Des Moines is allowed to self-transport less than 55 gallons at a time to its aggregation point without an EPA ID number. Therefore, NOPF item #15 is not applicable, and was rescinded. Messrs. Lloyd and Bailey were notified by email that NOPF item #15 was rescinded on May 25, 2012.

I asked Mr. Bailey if TPI generates any other used oil. He stated that the only other used oil generated at the facility was from the changing out of hydraulic oil in the molds, and

the facility just recently performed this oil change for the first time since the facility opened in 2008. Copies of the manifest and LDR notification that included the shipment of used oil from hydraulic oil changeout, dated March 29, 2012 are included in Attachment 26.

Records

On April 18, 2012, I reviewed the following facility records:

- 2011 Hazardous Waste Biennial Report (Attachment 7)
- MSDS for AIRSTONE™ 780E (Attachment 10)
- MSDS for V66V55 POUR OFF CATALYST (Attachment 11)
- MSDS for AIRSTONE™ 783H Hardener (Attachment 12)
- MSDS for ACETONE (Attachment 14)
- Inspection Log from April 18,2009—April 18, 2012 (Attachment 15)
- MSDS for 3M™ ADHESIVE REMOVER (Attachment 16)
- Safety-Kleen Waste Profile for Adhesive Remover (Attachment 17)
- MSDS for POLANE HB (Attachment 18)
- MSDS for BARSOL A-4212 (Attachment 19)
- Manifests and LDR notifications for hazardous waste shipments from 2009 through 2012
- Invoice from Forklifts of Des Moines dated January 9, 2012 (Attachment 25)
- Hazardous Waste Log from August 28, 2008 through November 4, 2011 (Attachment 27)
- RCRA Contingency Plan (Attachment 28)
- Emergency Action Plan (Attachment 29)
- Training Records for Rich Myers (copies of Mr. Myers' training records from 2008 to the present are included in Attachment 30)
- No-Exposure Certification for Exclusion from NPDES Storm Water Permitting (Attachment 31)
- Tier II Emergency and Hazardous Chemical Inventory report for 2011 (Attachment 32)

TPI generated 182 hazardous waste manifests from April 18, 2009 through April 18, 2012. I reviewed 20 hazardous waste manifests and associated LDR notifications during the CEI (five from 2009, five from 2010, five from 2011, and five shipments for 2012). I noted no concerns at the time of the CEI. However, following the CEI, I noted that the hazardous waste codes assigned to paint related waste since October 2011 are likely inaccurate, and the hazardous waste codes used prior to October 2011 may also be inaccurate. This concern has been previously discussed in this report and identified as NOPF item #14.

During the records review, I obtained a copy of a Hazardous Waste Log listing each hazardous waste shipment from August 28, 2008 through November 4, 2011

(Attachment 27). This log documents the frequency of the shipments, quantities, and the vendor that picks up the waste. The Hazardous Waste Log also shows the switch in hazardous waste transporters from Safety-Kleen to Barsol Solvents in October 2011.

I asked Mr. Bailey if TPI has a RCRA Contingency Plan. Messrs. Bailey and Lloyd explained that TPI is in the process of updating the RCRA Contingency Plan. Mr. Bailey asked if I would like to review the working draft. I explained that I would review the version of the RCRA Contingency Plan that is currently in place during the CEI. Mr. Bailey provided a copy of the existing RCRA Contingency Plan for my review (Attachment 28) as well as a copy of TPI's Emergency Action Plan (Attachment 29).

I reviewed the TPI RCRA Contingency Plan for compliance with the requirements of 40 CFR §265 Subpart D, and noted the following preliminary findings:

- The RCRA Contingency Plan does not describe the actions facility personnel must take to respond to fires, explosions, or any other release of hazardous waste or constituents.

  NOPF#8 – Failure to list descriptions of actions needed to respond to fires, explosions, or releases of hazardous wastes in the RCRA Contingency Plan [40 CFR §262.34(a)(4) – 265.52(a)].

- The RCRA Contingency Plan does not describe the arrangements with local emergency agencies, or indicate that the plan was submitted to local emergency agencies. During a subsequent telephone conversation, Mr. Lloyd stated that the current version of the RCRA Contingency Plan has not been submitted to local emergency agencies, as required.

  NOPF#9 –Failure to list description of arrangements with local emergency agencies as appropriate [40 CFR §262.34(a)(4) – 265.52(c)].

  NOPF#7 – Failure to submit RCRA Contingency Plan to Emergency Response Agencies [40 CFR §262.34(a)(4) – 265.53(b)].

- The RCRA Contingency Plan has a table on page 1 for listing the Primary Emergency Coordinators and Alternate Coordinators. However, the table only contains employee names. Addresses and telephone numbers (home and office) are not provided. This information is also not included in TPI's Emergency Action Plan.

  NOPF#10 – Failure to list addresses, and phone numbers (home and office) of emergency coordinator and designated primaries in the RCRA Contingency Plan; or to list alternates in the order of assuming responsibilities [40 CFR §262.34(a)(4) – 265.52(d)].

- The RCRA Contingency Plan contains a list of emergency equipment on page 2, but does not provide descriptions of the items or their capabilities. A map is

included showing the locations of fire extinguishers and first aid kits, but not the other emergency equipment (e.g., spill control equipment, communications and alarms, or decontamination equipment). The information missing from the RCRA Contingency Plan is not provided in the Emergency Action Plan.

NOPF#11 – Failure to describe emergency equipment, its locations, and its capabilities [40 CFR §262.34(a)(4) – 265.52(e)].

- The RCRA Contingency Plan contains an evacuation map showing the primary and alternate evacuation routes and exits. The plan does not describe the signal(s) to be used to begin evacuation, other than stating that the alarm will sound. Additional descriptions of the signals are provided in TPI's Emergency Action Plan. However, the Emergency Action Plan is a separate, stand-alone document and is not attached to, or referenced, in the RCRA Contingency Plan.

NOPF#12 – Failure to include complete evacuation plan in the RCRA Contingency Plan [40 CFR §262.34(a)(4) – 265.52(f)].

I asked Mr. Bailey how the hazardous waste training is conducted at TPI. He stated that the training is conducted onsite by either Barton Solvents or Compliance Solutions personnel. I asked to see the training records for Mr. Myers. Copies of the most recent training records (2008 to the present) for Mr. Myers were provided, and are included in Attachment 30. Mr. Myers' training records include the following:

- Certificate and test for Hazardous Materials Refresher training dated February 18, 2010.
- Sign-in sheet for five employees (including Mr. Myers) for a 30-minute RCRA Hazardous Waste training, dated February 27, 2012
- Certificate and course description for DOT Hazardous Materials Transportation training, dated November 6, 2008
- Certificate for DOT Security Awareness Training

No other training records for Mr. Myers are available. I asked Mr. Bailey for training records for Mr. Barnes. Mr. Bailey stated that Mr. Barnes has not received any hazardous waste training. I informed Mr. Bailey that since Mr. Barnes manages hazardous waste (cleaning paint guns and placing the hazardous waste into a hazardous waste storage container), hazardous waste training is required.

I asked Mr. Bailey if TPI has a written training plan mapping each employee to his/her job title, description of skills, education/qualifications/duties, and types of introductory and continuing training needed. He stated that TPI does not have this documentation.

Based on this information and the training records provided, I determined that the following RCRA training requirements are not being met:

- Training program that covers: response to emergencies, implementation of contingency plan, use of alarms, waste feed cut-offs and other emergency equipment as required [40 CFR §265.16(a)(3)].

- Employees do not work unsupervised without completing training and are trained within six months of initial hiring [40 CFR §265.16(b)]
- Employees are trained annually [40 CFR §265.16(c)]
- Maintaining records documenting job titles and names of persons filling the positions [40 CFR §265.16(d)(1)].
- Maintaining written job descriptions for each position, including: skills, education or qualification, and duties [40 CFR §265.16(d)(2)].
- Maintaining written description of type and amount of introductory and continuing training provided [40 CFR §265.16(d)(3)].
- Maintaining documentation confirming the required training has been completed [40 CFR §265.16(d)(4)].

During the CEI, I cited a single NOPF item (NOPF item #13) covering each of the preliminary findings listed above.

NOPF#13 – Failure to provide adequate RCRA training [40 CFR §265.16].

I asked Mr. Bailey if TPI has a National Pollutant Discharge Elimination System (NPDES) stormwater permit. He provided a copy of the No-Exposure Certification for Exclusion from NPDES Storm Water Permitting form submitted by TPI on May 12, 2009. A copy of this form is included as Attachment 31. I also obtained a copy of TPI's 2011 Tier II Emergency and Hazardous Chemical Inventory report (Attachment 32).

On April 18, 2012, I conducted an exit interview with Messrs. Bailey, Parriott, and Lloyd (via teleconference). I discussed the preliminary findings noted during the visual inspection, and the regulations pertaining to each situation. Additionally, I provided Mr. Bailey with copies of the following materials:

- Copy of RCRA §3007(a)
- Copy of 42 U.S.C. 1001/1002
- EPA *Notification of Regulation Waste Activity*
- EPA *Publications for Small Business*
- EPA Information Sheet: *Commercial Motor Vehicle Transportation System Security & Safety-CMV Transportation Security Planning*
- EPA Homeland Security Bulletin: *US EPA Region 7, December 2001, Security Awareness for Agricultural/Industrial Facilities, Pipelines, Transporters, Utilities, Warehouses of Chemicals*
- EPA *Managing your Hazardous Waste, a Guide for Small Business*
- EPA *Hazardous Waste Requirements for Large Quantity Generators*
- EPA *Managing Used Oil, Advice for Small Business*
- EPA Energy Star Information Sheet: *Compact Fluorescent Light Bulbs*
- EPA Energy Star Information Sheet: *Frequently Asked Questions, Information on Compact Fluorescent Light Bulbs (CFLs) and Mercury*
- EPA Universal Waste website printout

- EPA Supplemental Information for Small Businesses Subject to a U.S. EPA Enforcement Action
- EPA Office of Enforcement and Compliance Assurance Information Sheet: US EPA Small Business Resources handout
- EPA National Compliance Assistance Clearinghouse pamphlet
- EPA Innovative Solutions to your Environmental Challenges pamphlet
- EPA Compliance Assistance Centers handout
- Iowa Department of Natural Resources Used Oil Transporters and Processors Directory
- Iowa Department of Natural Resources Pollution Prevention Services pamphlet
- Iowa Department of Economic Development *Iowa Environmental Guide for Business*
- Iowa Waste Reduction Center On-Site Review Program pamphlet
- Instructions for Responding to an NOPF

After completing the April 18, 2012 CEI, I photographed the outside of the facility from the parking lots. These photographs are included in Attachment 5, Photos 23 through 25.

SUMMARY

Through interviews, records review, and visual inspection, I determined that TPI currently generates approximately 21,065 pounds of hazardous waste (D001, D002, and D035 characteristic; and F003 and F005 listed hazardous waste) per calendar month. As such the facility is currently operating as a LQG of hazardous waste. TPI is also operating as a generator of used oil I **issued an NOPF to TPI at the conclusion of the CEI.** The NOPF includes the following preliminary findings:

NOPF#1 - Failure to mark a hazardous waste storage container marked with the words "hazardous waste" [40 CFR §262.34(a)(3)].

NOPF#2 – Failure to mark an accumulation start date on a hazardous waste storage container [40 CFR §262.34(a)(2)].

NOPF#3 – Failure to keep a hazardous waste storage container closed [40 CFR §262.34(a)(1)(i) – 265.173(a)].

NOPF#4 – Failure to conduct weekly inspections of a hazardous waste container storage area [40 CFR §262.34(a)(1)(i) – 265.174].

NOPF#5 – Failure to have spill control equipment, fire control equipment and decontamination equipment available at a hazardous waste container storage area [40 CFR §262.34(a)(4) – 265.32(c)].

NOPF#6 – Failure to keep a hazardous waste satellite accumulation container closed [40 CFR §262.34(c)(1)(i) – 265.173(a)].

NOPF#7 – Failure to submit RCRA Contingency Plan to Emergency Response Agencies [40 CFR §262.34(a)(4) – 265.53(b)].

NOPF#8 – Failure to list descriptions of actions needed to respond to fires, explosions, or releases of hazardous wastes in the RCRA Contingency Plan [40 CFR §262.34(a)(4) – 265.52(a)].

NOPF#9 –Failure to list description of arrangements with local emergency agencies as appropriate [40 CFR §262.34(a)(4) – 265.52(c)].

NOPF#10 – Failure to list addresses, and phone numbers (home and office) of emergency coordinator and designated primaries in the RCRA Contingency Plan; or to list alternates in the order of assuming responsibilities [40 CFR §262.34(a)(4) – 265.52(d)].

NOPF#11 – Failure to describe emergency equipment, its locations, and its capabilities [40 CFR §262.34(a)(4) – 265.52(e)].

NOPF#12 – Failure to include complete evacuation plan in the RCRA Contingency Plan [40 CFR §262.34(a)(4) – 265.52(f)].

NOPF#13 – Failure to provide adequate RCRA training [40 CFR §265.16].

NOPF#14 – Failure to perform an adequate hazardous waste determination for paint related waste [40 CFR §262.11].

NOPF#15 – RESCINDED

Before exiting the facility, I referred to the EPA Task Order Contract Officer Representative's contact information letter, which was presented to Mr. Bailey during the entry briefing. I encouraged the TPI facility representative to provide EPA with written planned and/or completed actions as corrective measures to the NOPF.

Other than items specifically noted in the narrative, I observed no additional issues. However, further review by EPA may change or add to my findings.

Attachment 1

Copy of Facility Representatives' Business Cards

JIM BAILEY
Environmental Health & Safety Coordinator

direct 641-791-3524
cell 641-831-4795
email jbailey@tpicomposites.com
fax 641-791-3553

TPI Iowa, LLC
2300 North 33rd Avenue East
Newton, Iowa 50208
tel 641.791.3500
fax 641.791.3550

www.tpicomposites.com

Mark B. Parriott
Group Operations Director
General Manager

direct 641-791-3501
cell 915-356-0862
email mparriott@tpicomposites.com

TPI Iowa, Inc.
PO Box 847
2300 North 33rd Avenue East
Newton, Iowa 50208
tel 641.791.3500
fax 641.791.3550

www.tpicomposites.com

NOTICE OF PRELIMINARY FINDINGS (Continued)

FACILITY NAME: TPI IOWA LLC
ADDRESS: 2300 N 33RD AVENUE E.
NEWTON, IOWA 50208
EPA ID NUMBER: IAR000510156 **DATE:** 04/18/2012

#8 FAILURE TO LIST DESCRIPTIONS OF ACTIONS NEEDED TO RESPOND TO FIRES, EXPLOSIONS, OR RELEASES OF HAZARDOUS WASTES IN THE RCRA CONTINGENCY PLAN 40 CFR 265.52(a) FROM 262.34 (a)(4)

#9 FAILURE TO LIST DESCRIPTION OF ARRANGEMENTS WITH LOCAL EMERGENCY AGENCIES AS APPROPRIATE ~~40 CFR 265.52(c)~~ CAN 40 CFR 262.34(a)(4) → 265.52(c)

#10 FAILURE TO LIST NAMES, ADDRESSES, AND PHONE NUMBERS (BOTH HOME AND WORK) OF EMERGENCY COORDINATORS AND DESIGNATED PRIMARIES 40 CFR 262.34(a)(4) → 265.52(d)

#11 FAILURE TO LIST AND DESCRIBE EMERGENCY EQUIPMENT, ITS LOCATION, AND ITS CAPABILITIES ~~40 CFR 265.52(e)~~ CAN 40 CFR 262.34(a)(4) → 265.52(e)

#12 FAILURE TO INCLUDE COMPLETE EVACUATION PLAN (SIGNAL, ALTERNATE ROUTE) ~~40 CFR 265.52(f)~~ CAN 40 CFR 262.34(a)(4) → 265.52(f)

#13 FAILURE TO PROVIDE ADEQUATE TRAINING TO EMPLOYEES ~~40 CFR 265.16~~ CAN 40 CFR 262.34(a)(4) → 265.16

X #14 FAILURE TO ~~MAKE~~ CAN PERFORM AN ADEQUATE HAZARDOUS WASTE DETERMINATION ON PAINT RELATED WASTE 40 CFR 262.11

X #15 CAN ~~FAILURE TO HAVE USED OIL REMOVED BY A TRANSPORTER THAT HAS OBTAINED AN EPA ID NUMBER 40 CFR 279.24~~ CAN

INITIALS OF RECIPIENT: [illegible]

INITIALS OF PREPARER: CAN

X NOPFs 14 AND 15 ADDED BY CLIFFORD ALAN NELLES ON 05/10/12. DAVID LLOYD CONTACTED BY EMAIL ON 05/10/12

X NOPF 15 RESCINDED BY CLIFFORD ALAN NELLES ON 05/25/12 DAVID LLOYD CONTACTED BY EMAIL ON 05/25/12

Penalty Computation Worksheet Company Name: TPI Iowa LLC Address: 2300 N. 33rd Avenue East, Newton, Iowa 50208 RCRA ID: IAR000510156	
Count 1: Failure to comply with the following manifesting and land disposal restriction requirements: - 40 CFR 262.20(a) referencing 40 CFR 262, Appendix – Failure to completely fill out Item 13 of the manifest with all waste codes - 40 CFR 268.9(a) – Failure to determine each EPA hazardous waste code in order to determine the applicable treatment standards.	
Penalty Amount for Count 1 1. Gravity Based Matrix Value (value from Matrix Table) a. Potential for Harm: minor b. Extent of Deviation: minor c. Cell Position: 25% of the cell value	$290
2. Multi-day/Multiple Occurrence Component for Count 1 (3 occurrences – 1 occurrence) x $290 = a. Potential for Harm: minor b. Extent of Deviation: minor c. Cell Position: 25% of the cell value	$580
Initial Penalty Total	$870
Initial Penalty Total (with Nakayama rounding factor)	$900
3. Adjustment Factors (+/- 25 % adjustment allowed on each factor) a. Good Faith	0%
b. Willfulness/Negligence	0%
c. History of Noncompliance	0%
% Amount of Penalty Adjustment	0%
$ Amount of Penalty Adjustment	$0
4. Economic Benefit	$36
Penalty Amount for Count 1	$936
Total Penalty Amount for Complaint	$51,008

Penalty Computation Worksheet Company Name: TPI Iowa LLC Address: 2300 N. 33rd Avenue East, Newton, Iowa 50208 RCRA ID: IAR000510156	
Count 2: Solid Waste Disposal Act (SWDA) § 3005 (42 U.S.C. § 6925) - Operating as a TSDF without a permit by failing to comply with generator requirements.	
Penalty Amount for Count 2 1. Gravity Based Matrix Value (value from Matrix Table) a. Potential for Harm: moderate b. Extent of Deviation: moderate c. Cell Position: 75% of the cell value	$10,270
2. Multi-day/Multiple Occurrence Component for Count 2 (23 days – 1 day) x $1,762.50 = a. Potential for Harm: moderate b. Extent of Deviation: moderate c. Cell Position: 75% of the cell value	$38,775
Initial Penalty Total	$49,045
Initial Penalty Total (with Nakayama rounding factor)	$49,000
3. Adjustment Factors (+/- 25 % adjustment allowed on each factor) a. Good Faith	0%
b. Willfulness/Negligence	0%
c. History of Noncompliance	0%
% Amount of Penalty Adjustment	0%
$ Amount of Penalty Adjustment	$0
4. Economic Benefit	$1,072
Penalty Amount for Count 2	$50,072
Total Penalty Amount for Complaint	$51,008

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

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7012 1640 0001 7091 9259

Mr. Jim Bailey, Environmental Health
And Safety Coordinator
TPI Iowa LLC
2300 North 33rd Avenue
Newton, Iowa 50208

5020826100

Barton Solvents 1920 NE Broadway Des Moines IA, 50313	Project: Environmental Sampling Project Number: TPI Project Manager: Shawn Samples	Reported 12/07/12 22:45

TPI Paint Waste

1K21546-01 (Solid)

Date Sampled:11/29/2012 10:15:00AM

Keystone Laboratories, Inc. - Newton

Determination of TCLP Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Silver (TCLP)	ND	0.200	mg/L	4	1VL0015	12/03/12	12/04/12 00:09	EPA 6010B	
Arsenic (TCLP)	ND	2.00	"	"	"	"	"	"	
Barium (TCLP)	ND	10.0	"	"	"	"	"	"	
Cadmium (TCLP)	ND	0.100	"	"	"	"	"	"	
Chromium (TCLP)	ND	0.600	"	"	"	"	"	"	
Mercury (TCLP)	ND	0.00500	"	1	1VL0123	12/05/12	12/05/12 15:48	EPA 7470A	
Lead (TCLP)	ND	0.200	"	4	1VL0015	12/03/12	12/04/12 00:09	EPA 6010B	
Selenium (TCLP)	ND	1.00	"	"	"	"	"	"	

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Barton Solvents 1920 NE Broadway Des Moines IA, 50313	Project: Environmental Sampling Project Number: TPI Project Manager: Shawn Samples	Reported 12/07/12 22:45

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1VL0015 - EPA 3010A TCLP ICP										
Blank (1VL0015-BLK1)				Prepared & Analyzed: 12/03/12						
Arsenic (TCLP)	ND	0.100	mg/L							
Barium (TCLP)	ND	0.500	"							
Cadmium (TCLP)	ND	0.005	"							
Chromium (TCLP)	ND	0.030	"							
Lead (TCLP)	ND	0.010	"							
Selenium (TCLP)	ND	0.050	"							
Silver (TCLP)	ND	0.010	"							
LCS (1VL0015-BS1)				Prepared & Analyzed: 12/03/12						
Arsenic (TCLP)	2.17	0.100	mg/L	2.00000		109	80-120			
Barium (TCLP)	2.13	0.500	"	2.00000		106	80-120			
Cadmium (TCLP)	2.07	0.005	"	2.00000		104	80-120			
Chromium (TCLP)	2.14	0.030	"	2.00000		107	80-120			
Lead (TCLP)	2.12	0.010	"	2.00000		106	80-120			
Selenium (TCLP)	2.14	0.050	"	2.00000		107	80-120			
Silver (TCLP)	1.95	0.010	"	2.00000		97.7	80-120			
Matrix Spike (1VL0015-MS1)	**Source: 1K21546-01**			Prepared: 12/03/12 Analyzed: 12/04/12						
Arsenic (TCLP)	10.7	2.00	mg/L	10.0000	ND	107	70-130			
Barium (TCLP)	11.6	10.0	"	10.0000	0.522	111	70-130			
Cadmium (TCLP)	10.2	0.100	"	10.0000	ND	102	70-130			
Chromium (TCLP)	10.5	0.600	"	10.0000	ND	105	70-130			
Lead (TCLP)	10.2	0.200	"	10.0000	ND	102	70-130			
Selenium (TCLP)	10.3	1.00	"	10.0000	ND	103	70-130			
Silver (TCLP)	8.74	0.200	"	10.0000	0.0222	87.1	70-130			
Matrix Spike Dup (1VL0015-MSD1)	**Source: 1K21546-01**			Prepared: 12/03/12 Analyzed: 12/04/12						
Arsenic (TCLP)	11.1	2.00	mg/L	10.0000	ND	111	70-130	3.67	20	
Barium (TCLP)	12.0	10.0	"	10.0000	0.522	115	70-130	3.47	20	
Cadmium (TCLP)	10.6	0.100	"	10.0000	ND	106	70-130	3.11	20	
Chromium (TCLP)	10.8	0.600	"	10.0000	ND	108	70-130	2.73	20	
Lead (TCLP)	10.5	0.200	"	10.0000	ND	105	70-130	2.79	20	
Selenium (TCLP)	10.9	1.00	"	10.0000	ND	109	70-130	6.32	20	
Silver (TCLP)	9.14	0.200	"	10.0000	0.0222	91.2	70-130	4.48	20	

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Barton Solvents	Project: Environmental Sampling	Reported
1920 NE Broadway	Project Number: TPI	12/07/12 22:45
Des Moines IA, 50313	Project Manager: Shawn Samples	

Determination of TCLP Metals - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1VL0015 - EPA 3010A TCLP ICP										
Post Spike (1VL0015-PS1)		**Source: 1K21546-01**		Prepared: 12/03/12 Analyzed: 12/04/12						
Arsenic (TCLP)	0.228		mg/L	0.200000	0.0138	107	75-125			
Barium (TCLP)	0.240		"	0.200000	0.130	54.9	75-125			PS-01
Cadmium (TCLP)	0.208		"	0.200000	-0.002	105	75-125			
Chromium (TCLP)	0.214		"	0.200000	0.00454	105	75-125			
Lead (TCLP)	0.205		"	0.200000	-0.050	127	75-125			PS-04
Selenium (TCLP)	0.238		"	0.200000	0.0260	106	75-125			
Silver (TCLP)	0.0901		"	0.200000	0.00555	42.3	75-125			PS-01
Batch 1VL0123 - EPA 7470A Hg Water										
Blank (1VL0123-BLK1)				Prepared & Analyzed: 12/05/12						
Mercury (TCLP)	ND	0.00050	mg/L							
Blank (1VL0123-BLK2)				Prepared & Analyzed: 12/05/12						
Mercury (TCLP)	ND	0.00500	mg/L							
Blank (1VL0123-BLK3)				Prepared & Analyzed: 12/05/12						
Mercury (TCLP)	ND	0.00500	mg/L							
LCS (1VL0123-BS1)				Prepared & Analyzed: 12/05/12						
Mercury (TCLP)	0.00220	0.00050	mg/L	0.00250000		88.0	78-132			
Matrix Spike (1VL0123-MS1)		**Source: 1K21483-01**		Prepared & Analyzed: 12/05/12						
Mercury (TCLP)	0.0196	0.00500	mg/L	0.0250000	ND	78.4	78-136			
Matrix Spike Dup (1VL0123-MSD1)		**Source: 1K21483-01**		Prepared & Analyzed: 12/05/12						
Mercury (TCLP)	0.0213	0.00500	mg/L	0.0250000	ND	85.2	78-136	8.31	18	

Certified Analyses Included in This Report

Method/Matrix	Analyte	Certifications
EPA 6010B in Water		
	Arsenic (TCLP)	KS-NT,NELAC,SIA1X
	Barium (TCLP)	KS-NT,NELAC,SIA1X
	Cadmium (TCLP)	KS-NT,NELAC,SIA1X
	Chromium (TCLP)	KS-NT,NELAC,SIA1X
	Lead (TCLP)	KS-NT,NELAC,SIA1X
	Selenium (TCLP)	KS-NT,NELAC,SIA1X
	Silver (TCLP)	KS-NT,NELAC,SIA1X
EPA 7470A in Water		
	Mercury (TCLP)	IA-NT,NELAC,KS-NT

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Barton Solvents	Project:	Environmental Sampling	Reported
1920 NE Broadway	Project Number:	TPI	12/07/12 22:45
Des Moines IA, 50313	Project Manager:	Shawn Samples	

Code	Certifying Authority	Certificate Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2013
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2013
MO-KC	Missouri Department of Natural Resources	140	04/30/2013
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2013
SIAIX	Iowa Department of Natural Resources	95	02/01/2014

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600 East 17th Street South
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Barton Solvents 1920 NE Broadway Des Moines IA, 50313	Project: Environmental Sampling Project Number: TPI Project Manager: Shawn Samples	Reported 12/07/12 22:45

Notes and Definitions

PS-04	The post spike recovery exceeded acceptance limits. However, all other QC was acceptable.
PS-01	The post spike recovery was below acceptance limits. However, all other QC was acceptable.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Keystone LABORATORIES, INC.

MEMBER ACIL

Barton Solvents 1920 NE Broadway Des Moines IA, 50313	Project: Project Number: Project Manager:	Environmental Sampling TPI Shawn Samples	Reported 12/07/12 22:45

Sue Thompson

Sue Thompson
Project Manager II

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 1, 1991

Mr. James C. Maes, Vice-President
Blue Beacon International, Inc.
500 Graves Blvd. P.O. Box 856
Sauna, KS 67402-0856

Dear Mr. Maes:

This is in response to your March 1, 1991 letter regarding new solid waste regulations. Specifically, you expressed concerns with the prohibition on liquids in landfills and the Toxicity Characteristic Leaching Procedure (TCLP) used in the recent Toxicity Characteristic (TC) rule.

Your first concern deals with the drying of waste so as to remove the free liquid prior to disposal. Apparently, you are referring to the Agency's prohibition on liquids in hazardous waste landfills, whereas your letter indicates that you have determined that your waste is not a hazardous waste. If your waste is not hazardous, the federal regulations regarding liquids in hazardous waste landfills are not applicable. If a similar prohibition for non-hazardous waste landfills is being imposed by state or local regulations, your concerns should be expressed to those agencies.

Your second concern relates to the new Toxicity characteristic rule and the TCLP test used in that rule. The TC rule is used to identify wastes that are defined as "hazardous" under federal regulations. Our regulations require generators of solid waste to determine whether their waste exhibits the TC or any other hazardous waste characteristic. This determination can be made either by testing the waste or by using knowledge of the waste to determine whether a characteristic is exhibited. Additionally, a combination of the two approaches can be used (e.g., if it is known that certain TC hazardous constituents could not be present in the waste, but others are likely to be present, the TCLP can be performed for the suspected constituents only).

As to your suggestion regarding a statistically valid sampling program to characterize your industry's wastes, we believe that this is a sound approach to waste characterization and, to the extent that the waste is not highly variable, much more reasonable that sampling every load of waste destined for disposal. However, since it is not federal regulation that is requiring actual testing of your waste (as your letter recognizes, it is landfill owners that are apparently requiring
you to perform these tests) you should work with the landfill operators to determine a sampling/tuesting protocol that they will accept. EPA guidance on sampling procedures can be found in EPA's "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (EPA Publication SW-846)."

Should you have any other questions or concerns regarding the Toxicity Characteristic rule, please feel free to contact Steve Cochran, Chief of the Characteristics Section, at (202) 382-4770.

Sincerely,

Sylvia K. Lowrance

FaxBack # 11603

March 1, 1991

Ms. Sylvia Lawrence
EPA Solid Waste
401 M. Street S.W.
Washington, D.C. 20460

Dear Ms. Lawrence:

I have spoken with several people from your office concerning the major problems that are being caused by a portion of the new solid waste regulations. In most cases, they have recommended that I write to you and request assistance.

Blue Beacon is a Kansas based business that owns and operates truck washes throughout the United States. Presently we have 51 locations in 23 states. Our facilities are in specially designed buildings, and we wash only the exterior of over-the-road trucks. We do no chemical or tanker wash outs. In essence, we are a full serve car wash for semi-trucks. I have enclosed a brochure which shows our locations and our buildings.

In our facility, we have a mud sump. This consists of a pit in the center of the wash bay, lengthwise, that is 2 1/2' wide, 6' deep and 60' long. This mud sump is covered with open grates to allow the water and mud to enter. From this sump the water flows into two oil/sand separators. Each of these are 2 1/2' wide 6' deep and 6' long. From there it is discharged. These oil/sand separators are cleaned for oil and grease two times per week. Our design is very effective and is kept confidential by our company.

The mud that is cleaned from the trucks is collected in these pits. When it reaches a specified depth, it is removed by a backhoe tractor or suction pump truck The method used depends on the availability of equipment in the area. At this point, the new regulations begin causing problems. Per my understanding, they do not allow free liquids to be placed in a landfill. This requires drying the mud or placing it in unregulated areas. Drying the mud mechanically is extremely expensive and cost prohibitive. In essence, this regulation is causing auto washes, truck washes, etc. to dispose of the mud privately and in non-regulated areas. I don't believe the purpose was to have people hide waste, but it is having that effect.

Can the paint filter test for free liquids be changed for this type of waste? Is there some way that your office can deal with this problem and allow the waste to be disposed of in regulated landfills? If the mud is backhoed out of the pit, very little free liquid is present compared to normal rainfall.

The second problem deals with the new TCLP requirements. In the past almost all landfill operators required proof that our waste was non-toxic. We were able to satisfy this requirement by having an EP toxicity test performed on the mud. The cost for the toxicity test was $325 per location, times 51 locations or $16,515. We ran this test on aLl our locations and each one came back well within limits - non toxic. I will be glad to furnish them for your review.

Now we have the new requirement, TCLP. I realize we are not a listed or labeled waste that is required by regulation to have TCLP, but the regulations require landfills to not accept anything that does not pass this test. So effectively, the new regulation is being applied to us by landfill operators. It is not only the small operators in the rural areas, it is also BFI and Waste Management, etc. Virtually all the landfills we deal with are covering their backside by requiring this test. When you protest the cost and explain your waste, the infamous EPA quote is made, "We don't care what it costs you."

The TCLP costs $1,300 per test to run. It will cost Blue Beacon $66,300 for our locations. We cannot afford this and neither can the other car washes and truck washes in the country. I have had one landfill operator demand this test on every load of mud. It takes 3 loads to clean our pit, and our pits are cleaned 3 to 5 times per year.

Blue Beacon is an environmentally responsible, sensitive company, but I feel this is overregulation. Since 1986, there have been over 51,610 new environmental compliance regulations written by federal and state governments. A business person can physically not keep up with this avalanche of requirements from just one branch of its government.

I have been told by EPA employees at the regional and national level to dump the waste in non-regulated landfills or to buy a little piece of ground on which to dump. As I previously stated, I do not feel the EPA should be promulgating regulations whose purpose or effect is to cause waste to be disposed of outside of landfills to circumvent requirements. As for purchasing a small piece of land to dispose of our waste, this is not practical, affordable, nor does it keep our waste in controlled areas.

Since this regulation came from your department, can a new directive be written to deal with this problem? Could a national EPA cleaning house be established to classify a waste? For example, I would be willing to do a random sample of our facilities and run TCLP on a statistically significant sampling. From this, could it not be inferred that our waste should be acceptable in a landfill? The cleaning house could simply state the facts of the test and that it was ran per their requirements. Government departments do not like responsibility, but someone must be responsible for the tremendous financial burden and increased unauthorized disposal this is causing.

Please give this your immediate attention. I am available at any time for further discussion on this problem. It is critical to our business.

Sincerely,

James C. Maes
Vice-President

Satellite Accumulation Area in Question

Satellite Accumulation Area in Question

View from SAA to work area where waste is generated

View from SAA to work area where waste is generated

MEMORANDUM

SUBJECT: Frequently Asked Questions about Satellite Accumulation Areas

FROM: Robert Springer, Director
Office of Solid Waste

TO: RCRA Directors, EPA Regions 1-10

Purpose

The purpose of this memo is to reiterate and clarify the Environmental Protection Agency's (EPA) regulations under the Resource Conservation and Recovery Act (RCRA) hazardous waste management program regarding satellite accumulation areas (SAAs). For convenience, this memo pulls together answers to many of the frequently asked questions EPA receives regarding SAAs. Many, but not all, of the questions in this memo have been answered by EPA in previous letters and documents. For those questions that have been answered previously, citations to relevant memos and Federal Register preambles are provided in numbered endnotes.

Summary of Generator Accumulation Regulations

When accumulating hazardous waste on-site, large quantity generators (LQGs) must comply with 40 CFR 262.34(a) and small quantity generators (SQGs) must comply with 40 CFR 262.34(d) to avoid the requirement to obtain a hazardous waste treatment, storage, or disposal permit.[a] LQGs may accumulate hazardous waste on-site without

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[a] Generators of • 1000 kg/month of hazardous waste or >1 kg/month of acute hazardous waste are large quantity generators (LQGs). Generators of >100 kg/month but <1000 kg/month of hazardous waste are small quantity generators (SQGs). Generators of • 100 kg/month of hazardous waste and • 1 kg/month of acute hazardous waste are conditionally exempt small quantity generators (CESQGs) and are regulated under 40 CFR 261.5. The regulations for

interim status or a permit for up to 90 days, while SQGs have up to 180 days to accumulate hazardous waste without interim status or a

permit.[b] The Agency sometimes refers to these generator accumulation areas as "90-day" or "180-day" areas, or "central accumulation" areas.

The satellite accumulation provisions allow generators to accumulate up to 55 gallons of hazardous waste (or 1 quart of acute hazardous waste) in containers that are:

- at or near any point of generation, and
- under the control of the operator,

with fewer requirements than for central accumulation areas, provided the generator complies with the requirements of 262.34(c).

When a generator accumulates hazardous waste on-site in containers, the regulations for 90-day areas, 180-day areas and SAAs all refer generators to the container management standards in Part 265 Subpart I. The table below identifies the sections of Part 265 Subpart I that must be followed in each case:

Table 1
Container Management Standards for Generators

Section of Part 265 Subpart I		Satellite accum. area	180-day area (SQG)	90-day area (LQG)
265.171	Condition of containers	**YES**	**YES**	**YES**
265.172	Compatibility of waste with containers	**YES**	**YES**	**YES**
265.173	(a) Keep closed, except when adding/removing waste	**YES**	**YES**	**YES**

CESQGs are not discussed in this memo.

[b]Small quantity generators who must transport hazardous waste >200 miles for treatment, storage or disposal may accumulate waste on-site for 270 days without a permit or interim status (262.34(e)). Large quantity generators of F006 may accumulate hazardous waste on-site for 180 days without a permit or interim status provided the conditions of 262.34(g)(1)-(4) are met.

Section of Part 265 Subpart I		Satellite accum. area	180-day area (SQG)	90-day area (LQG)
	(b) Handle containers to avoid ruptures and leaks	no	**YES**	**YES**
265.174	Inspections	no	**YES**	**YES**
265.176	Special requirements of ignitable or reactive wastes	no	no	**YES**
265.177	Special requirements for incompatible wastes	no	**YES**	**YES**
265.178	Air emission standards	no	no	**YES**

In addition to the container standards indicated above, the regulations for both SQGs and LQGs have requirements for container labeling; personnel training; preparedness and prevention; emergency procedures; and waste analysis plans when treating hazardous waste on-site to meet the land disposal restriction (LDR) treatment standards. LQGs also must have contingency plans while SQGs must not accumulate more than 6000 kg of hazardous waste on-site at any one time.

In contrast, additional requirements for SAAs are limited to:

1. Generators must label satellite containers of hazardous waste with the words "Hazardous Waste" or "with other words that identify the contents of the containers." (262.34(c)(1)(ii))

2. When a generator accumulates more than 55 gallons of hazardous waste (or 1 quart of acute hazardous waste), the generator must (262.34(c)(2)):

   - mark the container with the date on which 55 gallons (or 1 quart of acute hazardous waste) is exceeded, and
   - remove the excess of 55 gallons (or 1 quart of acute hazardous waste) within three days or comply with the 90-day area or 180-day area regulations, as appropriate.

Frequently Asked Questions about Satellite Accumulation Areas

1. **Question:** Can small quantity generators establish SAAs according to 262.34(c) for their hazardous waste?

11. **Question:** If a facility has multiple SAAs, can hazardous waste be moved from one SAA to another?

Answer: No. Generators may not move hazardous wastes between SAAs.[10] Once a hazardous waste leaves an SAA, it must be destined for a central accumulation area that is regulated under 262.34(a) or (d) or for final treatment or disposal at a facility with a permit or interim status

However, a single SAA may have multiple points of generation. Movement or consolidation of hazardous waste within an SAA is permissible, as long as it remains "at or near" the "point of generation" and "under the control of the operator of the process generating the waste."

In addition, a generator may have more than one 90-day or 180-day central accumulation area, and the regulations do not prohibit the movement of hazardous waste from one fully regulated central accumulation area to another, as long as the hazardous waste remains on-site. However, the 90-day or 180-day "clock" for accumulation does not restart if the hazardous waste is moved to another central accumulation area.

12. **Question:** Do generators have to include the hazardous waste in SAAs in the monthly quantities for determining generator status (i.e., SQG or LQG)?

Answer: Yes. Generators must include all the hazardous waste in the various SAAs in their monthly quantities for determining generator status.[11] Sections 261.5(c) and (d) identify hazardous wastes that do not have to be counted when determining generator status. Hazardous waste stored in SAAs is not on this list; therefore, hazardous waste in SAAs must be included in the generator's monthly quantity determination.

13. **Question:** When a facility has equipment that discharges hazardous wastes to attached containers, do the containers that collect such wastes have to be in compliance with the SAA regulations?

Answer: Yes. Even if the discharging unit is not regulated under RCRA, the attached containers that collect hazardous wastes from such equipment must be in compliance with the SAA regulations, if those containers collect wastes that are listed or characteristic hazardous wastes. Waste containers in SAAs must be:

- in good condition (265.171)
- compatible with their contents (265.172)
- labeled with "words that identify the contents of the container" or the words "hazardous waste" (262.34(c)(1)(ii)).

In addition, the containers in SAAs must be closed, except when adding or removing hazardous waste (265.173(a)). Generators would not be required to keep such containers closed while hazardous waste is being added to the container; but generators would need to keep them closed when the hazardous waste is not being discharged to the attached container.

The container(s) attached to such equipment is a point of generation. It is possible for there to be multiple pieces of equipment within one SAA, and thus multiple points of generation within a single SAA, provided all the pieces of equipment are "at or near" each other and "under the control of the operator of the process generating the waste." Under this scenario, the total amount of hazardous waste in the SAA would be limited to 55 gallons (or 1 quart of acute hazardous waste) and a generator would be allowed to consolidate like hazardous wastes from multiple discharging units.

14. **Question:** If a facility has very small containers (e.g., vials or tubes) of hazardous waste that are too small to label with the words "hazardous waste" or "other words that identify the contents of the container," how should the containers be labeled?

Answer: Generally, we would expect the small containers to be placed in properly labeled larger containers, which would have the added benefit of secondary containment should the small containers break. However, other approaches that would achieve the same result also would be acceptable.

Additional Information

Please note that this letter discusses only the federal hazardous waste regulations. States that are authorized to implement the RCRA program may have regulations that are different than the federal regulations provided they are not less stringent than the federal program. Please consult your state regulatory requirements. If you have questions about the federal hazardous waste regulations discussed in this memo, please contact Kristin Fitzgerald at (703) 308-8286 or Fitzgerald.Kristin@epa.gov.

RO 14703

Endnotes for Q&A Portion of FAQ

1. April 1990; RCRA/Superfund Hotline Monthly Report; RCRA Online #13365.
2. October 1990; RCRA/Superfund Hotline Monthly Report; RCRA Online #13410.
3. December 20, 1984; 49 FR 49568; Final Rule; Docket # RCRA-1984-0028.
4. November 1, 1993; Weddle to Ware; RCRA Online #11791.
5. February 1996; RCRA/Superfund Hotline Monthly Report; RCRA Online #13777.
6. December 1999; RCRA/Superfund Hotline Monthly Report; RCRA Online #14418
7. December 20, 1984; 49 FR 49570; Final Rule; Docket # RCRA-1984-0028.
8. December 20, 1984; 49 FR 49570; Final Rule; Docket # RCRA-1984-0028.
9. December 20, 1984; 49 FR 49569; Final Rule; Docket # RCRA-1984-0028.
10. February 1999; RCRA/Superfund Hotline Monthly Report; RCRA Online #14337.
11. February 10, 1994; Shapiro to Dolce; RCRA Online #11812.

To obtain Federal Register notices, search EPA's E-docket at www.epa.gov/edocket.

To obtain references other than Federal Register notices, search RCRA Online at www.epa.gov/rcraonline.

Attachment 1

Hazwaste Management &
Disposal Plan

DELIVERING
COMPOSITE
SOLUTIONS

May 11, 2012

Newton Fire Department
410 S 2nd Ave W.
Newton, IA 50208

Re: Large Quantity Hazardous Waste Generation Activity.

To whom it may concern:

Please be advised that TPI Iowa LLC is a large quantity generator (greater than 1,000 kg/month) of hazardous waste, which is accumulated up to 90 days before being collected by an authorized transporter. Hazardous wastes predominantly consist of spent acetone and spent paint related materials. Both of these wastes are considered flammable liquids.

TPI's hazardous wastes are collected and stored in 55 gallon steel drums. Full drums are kept in our hazardous waste storage building, which is situated outside of the northeast corner of our building location at 2300 N 33rd Avenue area. The maximum capacity of our hazardous waste storage building is 10 drums.

Material Safety Data Sheets for the original materials are enclosed. Fire and health risks from the used material are expected to be similar to that of the original material. Additionally, a copy of our Hazardous Waste Emergency Contingency Plan (ECP) is enclosed for your reference.

If you have any questions regarding this information, or TPI's operations, please do not hesitate to contact me at 641-831-4795

Sincerely,

Jim Bailey
EHS Coordinator

Cc: Mark Parriott
Newton Police Department

Enclosures: Acetone and Barsol A4212 MSDS, TPI Hazardous Waste Emergency Contingency Plan

It is the EPA's intent to proceed with the filing of an administrative complaint and assessment of a civil penalty in this matter sometime within the next 60 days. Based on information currently available to the EPA, a proposed penalty of $51,008 has been calculated for the violations identified at your facility. Section 3008(g) of RCRA, 42 U.S.C. § 6928(g), authorizes a civil penalty of not more than $25,000 per day for violations of Subchapter III of RCRA. This figure has been adjusted upward for inflation pursuant to the 2008 Civil Monetary Penalty Inflation Adjustment Rule which amends 40 C.F.R. Part 19, so that penalties of up to $37,500 per day are now authorized for violations of Subchapter III of RCRA that occur after January 12, 2009. Enclosed for your review is the EPA's proposed penalty calculation worksheet. The penalty was calculated pursuant to the RCRA Penalty Policy, which can be found on-line at the following address, or you may contact me for a hard copy: www.epa.gov/compliance/resources/policies/civil/rcra/rcpp2003-fnl.pdf.

60-Day Pre-Filing Negotiations

While the EPA believes it is appropriate to proceed with a formal enforcement action, we also recognize that settlement of this matter may be better accomplished by conducting negotiations prior to the filing of a complaint. By this letter we are offering you the opportunity to negotiate a resolution of the proposed penalty before the complaint is filed. The settlement of this matter through payment of a civil penalty and any injunctive relief must be memorialized in a Consent Agreement and Final Order to be signed by you and the EPA within the 60-day period. As part of these pre-filing negotiations, the EPA will consider any additional information that you have that is relevant to the penalty or violations. If you are interested in participating in pre-filing negotiations, please contact me within **14 calendar days** of your receipt of this letter at (913) 551-7369. If you choose not to participate in pre-filing negotiations, do not contact me within the 14-day time period, or settlement is not reached within the 60-day pre-filing time period, the EPA intends to proceed with the filing of an administrative complaint.

Ability To Pay

If you believe you do not have the financial ability to pay the EPA's proposed penalty and want the EPA to consider your financial condition, you will need to provide the EPA with appropriate financial documentation to substantiate your claim **within the first 30 days** of the 60-day pre-filing negotiations period. Such documentation must include three years of signed federal income tax returns and audited financial statements, and a completed EPA financial ability to pay form. You may contact me for a copy of the form. Please note that review of your financial documents does not toll the 60-day pre-filing negotiations period.

Supplemental Environmental Projects

You may also wish to consider mitigating a portion of the penalty by performing a Supplemental Environmental Project. A SEP is a project purchased or performed by a violator that provides significant environmental benefits and has a nexus to the environmental harm threatened or caused by the violations. A full description of the EPA's policy concerning the use of SEPs in settlement actions can be found on the EPA's website at http://www.epa.gov/compliance/civil/seps/index.html.

As indicated above, the EPA has determined that there are serious violations of RCRA at the TPI Iowa LLC facility that warrant the assessment of a civil penalty. However, the EPA is committed to working with you to resolve this matter and believes that pre-filing negotiations offer all parties an opportunity to reach settlement without protracted litigation. Your immediate attention to this matter is greatly appreciated. If you have any questions, please do not hesitate to contact me at (913) 551-7369, or Deborah Bredehoft, RCRA Compliance Officer, at (913) 551-7164.

Sincerely,

Demetra O. Salisbury
Assistant Regional Counsel

Enclosure

Attachment 2

Hazardous Waste Contingency Plan

Revision History

Prepared By	Rev	Date	Reason for Change
Craig Althof	A	5/10/2012	Initial issue of document

Appendix A
Currently Approved Hazardous Waste Profiles

Waste Description	EPA Waste Code(s)	Hazard Class
Acetone	F003, D001	Flammable Liquid
Paint related materials	D001, D035, F003, F005	Flammable Liquid
Solvent contaminated rags	D001, F003	Flammable Solid
Epoxy Hardener	D002	Corrosive
Misc. Flammable Liquids	D001	Flammable Liquids

V. Once the shipment is loaded, you will need to go over the paperwork with the driver. He will have two or three different forms – hazardous waste manifest, non-hazardous waste manifest and/or land ban restriction forms.

VI. Review the forms to ensure the information is correct before you sign.

VII. Once the paperwork is complete, ask the driver to placard the truck. This is the generator's (TPI's) responsibility under the law. Most of what we ship is flammable, so he should turn the placards on all four sides of his truck to the red number 3 flammable sign before he drives off. Watch him until he has left our property.

VIII. Forward the signed copies of all the paperwork to the EHS Coordinator
   a. Maintain the paperwork in the Hazardous Waste Manifest file.
   b. The disposal facility will mail a signed copy of the manifest back to TPI within 45 days. This manifest shall be filed in the Hazardous Waste Manifest file by the EHS Coordinator.

9. Record Keeping

Hazardous waste records will be kept indefinitely.

10. Reporting

Annual hazardous waste data is required to be submitted to EPA Region 7 on a biennial basis for odd numbered years.

11. Training

An annual review will be conducted for all employees involved in handling or overseeing the disposal of hazardous wastes.

12. Hazardous Waste Minimization

TPI continues to explore methods and make efforts to reduce the volume and toxicity of hazardous waste generated to the degree which has been determined to be economically practicable. We have also selected the most practicable methods of treatment, storage, or disposal currently available to us which minimize the present and future threat to human health and the environment.

6. Labeling Requirements

Each container must be labeled with the following information:

I. The words: "Hazardous Waste – Federal Law prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the US Environmental Protection Agency"
II. TPI's EPA Waste Number. **IAR005510156**
III. DOT proper shipping name.
IV. DOT Hazard Label.
V. Our Name and address: **TPI Iowa LLC.**
2300 N 33rd Avenue
Newton, IA 50208

Preprinted hazardous waste drum labels (containing all of the above information) are provided by hazardous waste disposal contractor for each type of hazardous waste generated by TPI.

7. Weekly Inspections

The Warehouse staff is responsible for inspecting the hazardous waste storage area every week. An inspection form has been set up and is located on a clipboard inside the hazardous waste storage building.

The inspection will include:

I. Inspector's initials
II. Time/date of inspection
III. Number of drums in storage
IV. Ensure drums are properly closed
V. Ensure no signs of leakage
VI. Confirm area is dry
VII. Note if there is evidence of spill and action taken to clean it up
VIII. Confirm proper labeling on drums, including an accumulation start date. Ensure labels are no further apart than 3 inches and are always visible for inspection.

Any issues should be addressed immediately and noted or reported to the EHS Coordinator. All completed forms are maintained by the Warehouse Supervisor.

8. Shipping Hazardous Waste

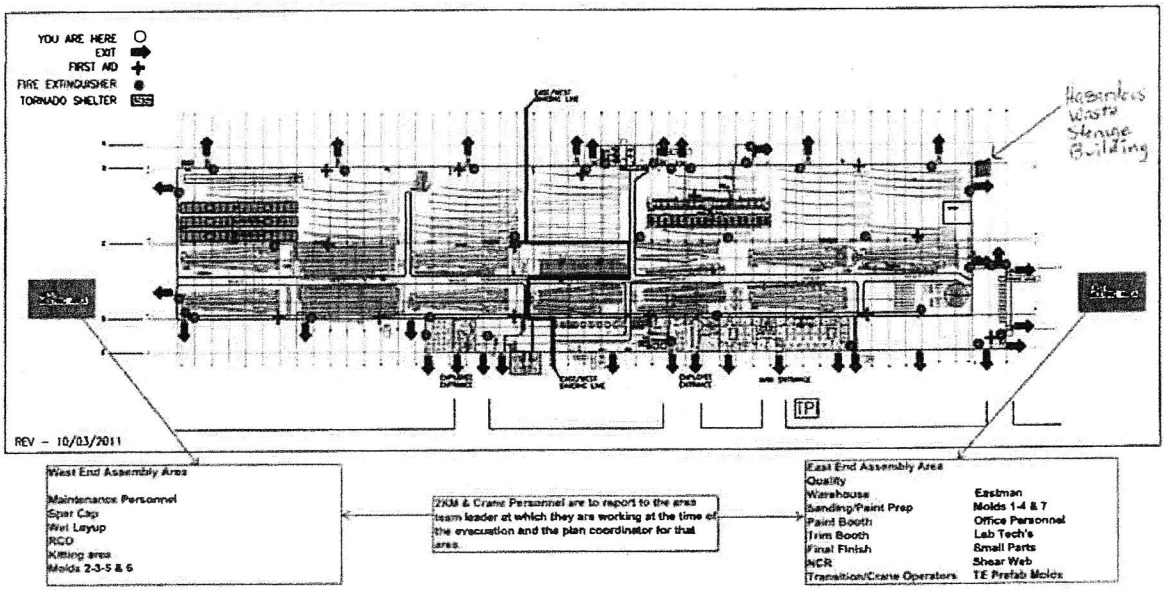
Hazardous waste may not be stored on site for a period of more than 90 days (beginning when the waste is placed in the hazardous waste storage area). The following are instructions on how to make arrangements to ship our hazardous waste. (Note: Only an employee trained to ship hazardous materials may do so):

I. Contact the Purchasing Department to schedule a pickup.
    a. If you have an unusual, one-time waste, contact the hazardous waste disposal contractor to obtain pre-approval prior to pick-up.
II. When the truck arrives, stand by and observe as all drums are loaded.
III. The driver will have new labels with him which he will place over our labels. These labels have more detailed information than ours about shipping names and UN numbers. They will also have a reference to the manifest number on each label, check that this is correct.
IV. Check the USEPA ID number and make sure that is correct – TPI's USEPA ID number is **IAR005510156**

Attachment 3

LQG Notification /
ECP letter

Emergency Evacuation



8. Arrangements

The Newton Fire Department acts as our primary emergency response team as well as the Newton Police Department. Each department will be provided with a current copy of this plan.

Revision History

Prepared By	Rev	Date	Reason for Change
Craig Althof	A	5/10/2012	Initial issue

Note: Keep in mind that absorbent materials like speedy dry and rags (even with minor contamination) must be considered as hazardous waste and must be handled in accordance with our normal hazardous waste handling procedures.

5. Emergency Equipment:

The following equipment must always be on site and in operating condition:

I. Alarm System
II. Phone System
III. Mobile telephones
IV. Fire Extinguishers-ABC type fire extinguishers are located throughout the plant
V. Sprinkler Systems-located throughout the building
VI. Spill Control Kits-Located in close proximity to satellite accumulation stations these kits are made up of speedy dry, a shovel and a bucket
VII. Personnel Protection Equipment-This includes respirators, dust masks, gloves and tyvek suits
VIII. Exit Signs with emergency backup power.

6.Evacuation Routes:

In the event an emergency arises involving hazardous materials which requires the evacuation of the building, the alarm will sound. All employees, contractors and visitors must exit the building through the nearest exit as outlined in the Emergency Action Plan (EHS 003). Once outside the building, all employees should group at their designated evacuation assembly area and wait for further instruction.

The Emergency Coordinators at TPI Iowa LLC are:

Primary Coordinator	Address	Home Phone	Mobile Phone
Jim Bailey	[redacted]	[redacted]	[redacted] Ex. 6 PII

Alternate Coordinator	Address	Home Phone	Mobile Phone
Rich Myers	[redacted]	[redacted]	[redacted] Ex. 6 PII

To report a serious emergency requiring local police, fire, or medical support, Dial 8 and then 911

A dispatcher will answer your call. Describe the nature of the emergency and the location in the facility (front, back, right side, or left side of the building). When the emergency crew arrive, someone should meet them outside the building and direct them where needed.

4. Emergency Procedures

During an emergency involving hazardous wastes, the Emergency Coordinator will perform the necessary actions to insure a timely and appropriate response. The emergency coordinator shall choose the order and applicability of the following actions based upon the situation and the hazardous materials involved.

I. Identify and assess the situation with respect to source, health, area affected, and environmental impact.

II. Activate the appropriate level of alarm to notify all affected company personnel and contractors.

III. Evacuate the area or building as outlined in the emergency evacuation plan if necessary.

IV. Determine action to be taken and resources required. This may include containment and/or absorption.

V. Oversee the cleanup throughout its entirety

In the event of a spill of hazardous waste which presents risk of injury to health or environment or during an emergency where the facility must implement its contingency plan, the emergency coordinator must also notify the TPI Corporate EHS Engineer who will assume responsibility for making any subsequently necessary notifications (including reports) to the appropriate regulatory authorities The Corporate EHS Engineer will need the following information:

I. Date, time, and type of incident

II. Material and quantity involved

III. Extent of injuries, if any

IV. Assessment of actual or potential hazards to human health or the environment, if applicable

V. Estimated quantity and disposition of recovered material that resulted from the incident

1. Overview

Large Quantity Generators of hazardous waste are required to prepare a formal written plan outlining specific steps that company personnel will take in response to spills, fires, and explosions or any unplanned release involving hazardous wastes which could threaten health or the environment. This document outlines TPI Iowa LLC Inc.'s (TPI) hazardous waste contingency plan.

2. Hazardous Waste

TPI presently generates over 6 different types of hazardous waste, 3 of which constitute more than 90% of TPI's total hazardous waste. These hazardous wastes are:

1. Waste paint related materials (flammable liquids)
2. Waste acetone (flammable liquids)
3. Waste solvent contaminated solid materials (e.g., acetone rags – flammable solids)

Hazardous waste is accumulated in satellite hazardous waste accumulation containers (55 gallon steel drums) stationed throughout the plant. Containers accumulating hazardous wastes that are characterized as flammable liquid (e.g., paint related materials and acetone) are individually stored in flammable liquid storage cabinets. Hazardous waste (full accumulation containers) is stored in a fire rated chemical storage building that is located outside of the northeast corner of the building. This building has a storage capacity of 10 drums, has a secondary containment in excess of 75 gallons, and is equipped with a portable fire extinguisher and spill containment materials. Hazardous waste storage is limited to 90 days, but is typically stored for a maximum of 14 days due to the availability of weekly hazardous waste pick-ups. The hazardous waste storage building is kept locked and is only accessible by authorized employees.

3. Emergency Coordinators

The emergency coordinators listed below are authorized to act as on-scene coordinators and to commit the necessary resources during an emergency. Actions taken by the emergency coordinator may include stopping processes and operations, collecting and containing waste, as well as removing or isolating containers. There shall always be at least one coordinator (primary or alternate) either on the company premises or on-call.

Emergency coordinators must be familiar with all aspects of the contingency plan, all operations and activities at the company, the locations and characteristics of wastes handled and stored, the location of all environmental records, and the physical layout of the company.

Emergency coordinators must be prepared to act quickly to protect employees while taking reasonable measures to ensure that fires, explosions, and/or releases do not occur, recur, or spread to other areas in the building. These measures shall include stopping processes and operations, collecting and containing released waste and removing or isolating containers.

1. Overview

In the course of business, TPI Iowa LLC (TPI) generates hazardous wastes. TPI has developed these instructions to meet the requirements of OSHA 40 CFR 260 to 265.

2. Hazardous Waste Management

Materials are considered to be Hazardous Waste if they meet any of the following criteria:

I. They are listed by the U.S. Environmental Protection Agency in 40 CFR 261 Subpart D (a listed waste). (Note that some wastes are defined as "acutely hazardous waste" and therefore the quantity which can be temporarily stored on-site is limited. Section 2.2 provides more information).

II. They demonstrate ignitability, corrosively, reactivity, or toxicity as outlined in 40 CFR 261 Subpart C (a characteristic waste).

TPI's predominantly generated hazardous waste types are flammable liquids and flammable solids. A listing of TPI's routinely generated hazardous waste profiles are listed in Appendix A.

3. Handling Flammable Hazardous Wastes

Hazardous waste flammable liquids and solids are generated primarily from cleaning tools and equipment that comes in contact with paint and epoxy resin. These wastes are collected at or close to the point of generation in satellite accumulation containers . Employees are responsible for placing hazardous flammable wastes they generate into the proper satellite hazardous waste collection container.

When a satelliteaccumulation drum is full a Warehouse employee is contacted. The warehouse employee is responsible for closing (including labeling and dating) and immediately transferring the full drum to the plant's Hazardous Waste Storage area. The warehouse employee is also responsible for providing a properly prepared, empty satellite accumulation drum.

4. Hazardous Waste Storage Area

Hazardous waste is stored in a fire rated chemical storage building which is located outsideofthe northeast corner of the building. The storage building has a maximum storage capacity of 10 drums, is equipped with adequate secondary containment, a portable fire extinguisher, and spill cleanup materials. The building is kept locked and is only accessible by Warehouse employees.

5. Time Limits

TPI may keep hazardous wastes on site for no more than 90 days. However, the actual maximum amount of time hazardous waste is stored on site is typical less than 14 days.